

Case No: 2023-0205 Date of visit: 17/05/2023

Time spent on site: 2h Main Inspector: [Redacted]

Site No: FS1342 Site Name: West Strome
Business No: FB0169 Business Name: Bakkafrøst Scotland

Case Types: 1 DIA 2 REP 3 [] 4 [] 5 [] 6 []

Water Temp (°C): 9.8 Thermometer No: T173 FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA M-20

Dead/weak/abnormally behaving fish present? [Y] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [Y] If yes, see additional information/clinical score sheet.
Gross pathology observed? [Y] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? [Y]

UNI/REG only - if unable to carry out intended visit detail reason below:
[Redacted]

Additional Case Information:

Site inspection conducted after reports of increased mortalities during an inspection at another site. Mortalities have been low since input.

Mortalities for the last four weeks, wk 17 466 (0.08%), wk 18 333 (0.06%), wk 19 saw a marked increase of 2619 (0.46%) and wk 20 6517 (1.15%).

Majority of fish are eating reasonably well. One cage inspected and three fish were removed for diagnostic sampling. ~100 fish swimming slowly on the surface, spiralling, lethargic and moribund. Some Eye damage noted as well as some bi-lateral exophthalmia.

One fw and FLS treatment 24/4/2023 to the 27/4/2023. No significant mortality increase. Sea lice numbers have just increased.

A novel species of jellyfish had been observed in the area suspected to be *Sarsia tubulosa*, it is unsure if this is part of the increased mortality

Case No:

Date of Visit:

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
2. Changes made to details?

Site Details (include cleaner fish for all sections)

Total No facilities

Species

Age group

No Fish

Mean Fish Wt

Next Fallow Date (Site)

Recent (last 4 wks) disease problems?

If yes, detail:

Movement Records

1. Movement records available for inspection?
2. Date of last inspection:
3. Are records complete and correctly entered?
4. Are movement records available for dead fish and waste?
5. Are records complete and correctly entered?
6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
- If other detail:
3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks):
 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason:

see additional comments

6. Any other peaks in mortality during period checked?
- If yes, detail:
7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action:
8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (see comment)?

If yes, detail:

If other, detail:

2. Medicines records available for inspection?

3. Are records complete and correctly entered?

4. Are fish in a withdrawal period?

5. If yes, what treatment(s)?

If other, detail:

6. Are medicines stored appropriately?

Biosecurity Records

1. Biosecurity records available for inspection?

2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?

3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any *increased* (*unexpl*

4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected be

5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, cert

6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of c

7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held

8. Have the biosecurity procedures been adequately implemented on site?

If no, detail:

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?

2. If yes, are results available for inspection?

3. Any significant results?

If yes, detail (if not detailed under recent disease problems).

2023-0205

17/05/2023

	16
SAL	
2022 Q3	
563,268	
1.44kg	
	March 2024

Issue with elevated mortality but no disease confirmed, lethargy and eye damage noted. Biology department suspect bac

[Redacted]

site inspectio

(ained) mortality at the site been included?
en included and *how* and *when* that will be notified to Scottish Ministers?

ification if required)?

disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?

d on site?

Records checked between:

Site No:

Inspector(s):

Facilities stocked	<input type="text" value="14"/>	No facilities inspected	<input type="text" value="1"/>

Next Input Date (Site)

Any escapes (since last visit)?

aterial infection but not confirmed yet

n samples taken

Case no: Site No: Date of visit/
 Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No	F1	F2	F3	P1								
Fish nos	1	2	3	1-5								
Pool Group	P1	P1	P1									
Species	SAL	SAL	SAL	SAL								
Average weight	1.44kg	1.44kg	1.44kg	1.44kg								
Sex	N/A	N/A	N/A	N/A								
Water Type	SW	SW	SW	SW								
Stock Details		Applecross	Applecross	Applecross	Applecross							
	Stock Origin											
Facility No	4	4	4	4								

23	Additional Sample Information:

4 Total Tests assigned 3

Case no: 2023-0205

Site No: FS1342

Method of killing: Percussive

Date of visit: 17/05/2023

Inspector(s):

Sheet Relevant: Y

S for strong presence: M for medium presence: W for weak presence

Fish Number		1	2	3					
Time sampled after death (if > 45 minutes)									
External Signs									
Behaviour	Moribund	S	S	S					
	Lethargic	S	S	S					
	Hanging vertical								
	Spiralling			S					
	Flashing								
	Loss of equilibrium	W	W	W					
Body	Dark								
	Distended abdomen		W						
	Anorexic								
	Scale Oedema								
Opercula	Shortened								
	Flared								
Haemorrhaging	Throat								
	Ventrum								
	Base of fins								
	Elsewhere								
Eyes	Exophthalmic								
	Enophthalmic (sunken)								
	Cataract								
	Haemorrhagic								
Gills	Pale								
	Zoned								
	Necrotic								
Lesions	Flank								
	Elsewhere								
Vent	Inflamed								
	Trailing faeces								
Lice Load	Estimate numbers								
Internal Signs									
Ascites	Clear		S						
	Bloody								
Oedema	In tissues								
Heart	Pale/anaemic	m	m	S					
	Granulomas								
	Deformed			W					
Liver	Petechial haem								
	Gross haem								
	Tissue breakdown								
	Enlarged								
	Colour number(s)	5	5	5					
	Granulomas								
	Lesions								
Pyloric caeca	Petechial haem								
	Tubules mauve	S	W						
	Lack of fat	S							
Spleen	Enlarged	S	S	S					
	Granulomas	W		m					
Gut	No food present								
	Yellow pseudo-faeces								
	External haem								
	Internal haem								
Body wall	Haemorrhaging								
Swim bladder	Haemorrhaging								
	Fluid filled								
Kidney	Swollen								
	Grey	W	W	W					
	Granular	S	S	S					
	Liquefied								
General	Parasites present								
	Anaemia								

Case no: 2023-0205

Date of visit: 17/05/2023

S for strong presence: M for medium presence: W for w

Fish Number															
Time sampled after death (if > 45 minutes)															
External Signs															
Behaviour	Moribund														
	Lethargic														
	Hanging vertical														
	Spiralling														
	Flashing														
	Loss of equilibrium														
Body	Dark														
	Distended abdomen														
	Anorexic														
	Scale Oedema														
Opercula	Shortened														
	Flared														
Haemorrhaging	Throat														
	Ventrum														
	Base of fins														
	Elsewhere														
Eyes	Exophthalmic														
	Enophthalmic (sunken)														
	Cataract														
	Haemorrhagic														
Gills	Pale														
	Zoned														
	Necrotic														
Lesions	Flank														
	Elsewhere														
Vent	Inflamed														
	Trailing faeces														
Lice Load	Estimate numbers														
Internal Signs															
Ascites	Clear														
	Bloody														
Oedema	In tissues														
Heart	Pale/anaemic														
	Granulomas														
	Deformed														
Liver	Petechial haem														
	Gross haem														
	Tissue breakdown														
	Enlarged														
	Colour number(s)														
	Granulomas														
	Lesions														
Pyloric caeca	Petechial haem														
	Tubules mauve														
	Lack of fat														
Spleen	Enlarged														
	Granulomas														
Gut	No food present														
	Yellow pseudo-faeces														
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	Internal haem														
Body wall	Haemorrhaging														
Swim bladder	Haemorrhaging														
	Fluid filled														
Kidney	Swollen														
	Grey														
	Granular														
	Liquefied														
General	Parasites present														
	Anaemia														

Additional comments:

Within the pen some fish with exophthalmia, others with eye damage. Some fish were hanging vertically as well as spiralling. Numerous fish moribund swimming on the surface.

Case No: **2023-0205** Date of visit: **17/05/2023**
 Site No: **FS1342** Inspector: **[REDACTED]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp
AGD (Neoparamoeba perurans) (PCR) - AGDQ	0/2	24/05/2023		24/05/2023		27/06/2023		
IHN (PCR) - IHNP	0/3	24/05/2023		23/03/2023		27/06/2023		
IPN (PCR) - IPNM	0/3	24/05/2023		23/03/2023		27/06/2023		
ISA (real time qPCR - heart & kidney) - ISAQ	0/3	24/05/2023		23/03/2023		27/06/2023		
Paranucleospora theridion (PCR) - PNST	0/2	24/05/2023		24/03/2023		27/06/2023		
Piscine myocarditis virus (CMS) (PCR) - PMVP	0/3	24/05/2023		23/03/2023		27/06/2023		
Salmon gill poxvirus (PCR) - SPVP	0/2	24/05/2023		24/03/2023		27/06/2023		
Salmonid alphavirus (SAV) (PCR) - SALP	0/3	24/05/2023		23/03/2023		27/06/2023		
VHS (PCR) - VHSP	0/3	24/05/2023		23/03/2023		27/06/2023		
Gill pathology - GPAT	3/3	31/05/2023		31/05/2023		27/06/2023		
Heart pathology - HPAT	3/3	31/05/2023		31/05/2023		27/06/2023		
Kidney pathology - KPAT	3/3	31/05/2023		31/05/2023		27/06/2023		
Spleen pathology - SPAT	3/3	31/05/2023		31/05/2023		27/06/2023		
Yersinia ruckeri (ERM) - YRUK	3/3	02/06/2023		02/06/2023		27/06/2023		

Report Summary	Date	Insp	2 nd Insp
Case Type	27/06/2023		
DIA			

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0169	DATE OF VISIT	17/05/2023
SITE No	FS1342	SITE NAME	West Strome
CASE No	20230205	INSPECTOR	██████████

Section 1: Summary

The site was inspected following reports of increased mortality occurring at the site, three fish were removed from one pen for further examination and subsequent diagnostic sampling.

Histopathological examination revealed features of necrotising myocarditis, nephritis and splenitis that could be related to bacterial infection. Occasional/rare bacteria were observed in the heart, kidney and spleen of some fish. Mild epithelial lamellar branchitis also observed.

Yersinia ruckeri, the causative agent of Enteric Redmouth (ERM), was isolated from plates taken from kidney material of F1-F3. The purity of growth would not suggest the bacterium would be the primary cause of morbidity however, as a primary fish pathogen the level of growth observed would suggest a risk to fish health which is confirmed by the histopathology observed.

Please contact myself or the duty inspector should you require any further information, have any queries regarding this report or if any problems develop.

Section 2: Case Detail

Observations

During an inspection at Sgeir Dughall it was reported that West Strome had just reported elevated mortalities, a site visit was conducted following the inspection at Sgeir Dughall.

At the time of inspection, the site was stocked with 563,298 Atlantic salmon at an average weight of 1.44kg. Mortalities had been low until week 19 when levels had increased.

On inspection of pen four ~100 fish were observed swimming slowly below the surface, some were lethargic and moribund others were aimless and some spiralling was also noted. A number of fish had eye damage and some bi-lateral exophthalmia was also observed. Three were removed from the pen for diagnostic sampling.

F1-F3 were moribund and lethargic with a loss of equilibrium, F3 also displayed spiralling behaviour, the body of F2 was notable distended.

Internally the hearts of F1-F3 were pale/anaemic and was also deformed in F3. Clear ascites was present in F2. The tubules of the Pyloric caeca of F1 and F2 were mauve in appearance and lacking fat in F1. F1-F3 displayed splenomegaly with granulomas noted in F1 and F3. The kidneys of F1-F3 were grey and granular.

Samples

Samples were collected from F1-F3 fish according to the table below:

Fish number	Facility number	Species	Stage	Origin
F1-F3	4	A. salmon	1.44kg 2022 Q3	Applecross

Results

Bacteriology: Kidney and gill material from F1-F3 was inoculated onto appropriate media for the isolation of bacteria.

The following bacteria were isolated:

- *Yersinia ruckeri* (isolate A kidney F1-F3)

From the tests conducted, we do not have evidence of resistance to oxytetracycline, sulphamethoxazole/trimethoprim or florfenicol, but no evidence of sensitivity to amoxicillin.

Virology: Tissue samples were tested for segments of nucleic acid indicative of the presence of the pathogens specified below using real-time PCR (qPCR).

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious pancreatic necrosis virus (IPNV), infectious salmon anaemia virus (ISAV), salmonid alphavirus (SAV) and viral haemorrhagic septicaemia virus (VHSV), salmon gill poxvirus (SGPV) and piscine myocarditis virus (PMCV).

Parasitology: Tissue samples were tested for segments of nucleic acid indicative of the presence of the parasites specified below using real-time PCR (qPCR).

The samples tested negative for *Neoparamoeba perurans* (AGD) and *Paranucleospora theridion*.

Histology: Tissue samples of gill, skin and skeletal muscle, heart, pyloric caeca, pancreas, hind gut, liver, spleen and kidney were taken from F1-F3. The tissue samples were fixed in 10% neutral buffered formalin.

Histopathological examination revealed the following:

Gill: F3 displayed mild lamellar epithelial hyperplasia and haemorrhage. Occasional several basophilic epithelial inclusions (likely epitheliocystis) observed in all fish. Few aneurysmal dilation/telangiectasia and cell debris with bacteria among gill filaments (F2-F3).

Skin & Muscle: Within normal range.

Heart: Mild to moderate necrotising myocarditis (F1-F3) with rare rod-shape Gram-negative bacteria (F1). Epicarditis, mild (F1-F3).

Gut and pyloric caeca: Peritonitis, mild (likely associated with vaccine administration).

Pancreas: Within the normal range.

R09

UKAS accredited testing laboratory No. 1964
Marine Laboratory, 375 Victoria Road, Aberdeen, AB11 9DB
Tel - 0131 244 3498 Fax - 0131 244 0944 Email - ms.fishhealth@gov.scot
Website - www.gov.scot/Topics/marine/science

Liver: Some cuffing observed in all fish.

Kidney: Foci of interstitial cell necrosis with presence of some neutrophil-like cells observed in all fish and F1, F2 also displayed occasional to some Gram-negative bacteria.

Spleen: Necrotising splenitis, multifocal, mild (F1 - F3), chronic (F2) with occasional to some Gram-negative bacteria (F1, F2 & F3), some evidence of erythrophagocytosis observed in all fish. F3 also displayed mild capsulitis.

Signed:



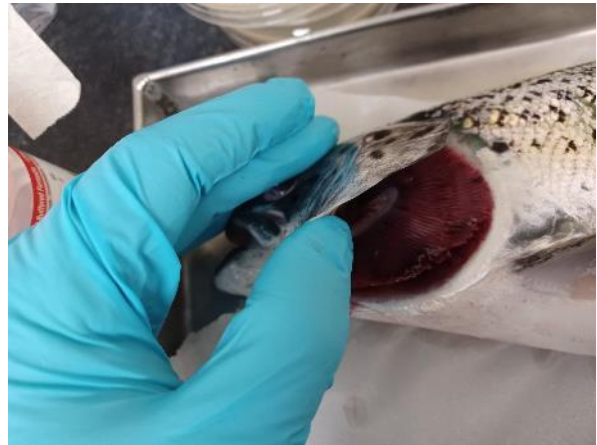
Date: 27/6/2023

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>



F1-3



F1



F1



F2



F2



F3

Case No: 2023-0209 Date of visit: 29/05/2023

Time spent on site: 2 hours Main Inspector: [Redacted]

Site No: FS0057 Site Name: Corry Farm
Business No: FB0447 Business Name: Wester Ross Fisheries Ltd

Case Types: 1 VMD 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): 11.5 Thermometer No: T147 FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: M-12

Dead/weak/abnormally behaving fish present? N If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.
Gross pathology observed? N If yes, see additional information/clinical score sheet.
Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:
[Redacted]

Additional Case Information:

From mort spreadsheet; Movement in March to Torridon, 10 hour well boat treatment . 1.77% morts FW wellboat treatment during transport 2374 fish @ 3.6kg- from Ardmair not Corry Farm - Possible CMS - informed during visit that this movement was of larger fish from Ardmair. Thought stress and CMS may have caused the mortality.

Recent tests for SAV ,PRV, CMS - PCR negative

All fish treated for AGD, trap treatments. - Paramove 21/5/23 because it was a gill treatment and not for sea lice it is off label and given a 500oday withdrawal. Fish also on withdrawal for TMS.

Site used as a nursery site as oxygen levels can be low in the summer so fish tend to be moved to another site for on growing.

Mort disposal moved off site whole by Hazco - Denholm Environmental, Grangemouth. - disposal site Binn Group, Bin Farm, Glenfarg, Perth PH2 9PX.

cleaner fish mortality for period 1/1/23 to 7/6/23 ; wrasse 86/site; lumps 3941/Site. Lump mortality attributed to bacterial infection - no treatments undertaken.

Case No: 2023-0209

Site No: FS0057

Date of Visit: 29/05/2023

Inspector(s):

Registration/Authorisation Details

- 1. Business/site details summary checked by site representative? Y
- 2. Changes made to details? Y

Site Details (include cleaner fish for all sections)

Total No facilities	64	Facilities stocked	60	No facilities inspected	20
Species	wrasse	Sal	lumpfish		
Age group	mixed	2022 Q4	mixed		
No Fish	2,270	495000	39,757		
Wt	170g	1372g	120g		
Next Fallow Date (Site)	5th July 2023		Next Input Date (Site)	Oct 2023	
Recent (last 4 wks) disease problems?			N	Any escapes (since last visit)?	N
If yes, detail:					

Movement Records

- 1. Movement records available for inspection? Y
- 2. Date of last inspection: 25/04/2023
- 3. Are records complete and correctly entered? Y
- 4. Are movement records available for dead fish and waste? Y
- 5. Are records complete and correctly entered? Y
- 6. Are health certificates for introductions (outwith GB) available? N/A

Transport Records

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

- 1. Mortality records available for inspection? Y
- 2. How are mortalities disposed of? Other (detail)
 detail: see additional info
- 3. Mortality records complete and correctly entered? Y
- 4. Recent mortality (last 4 wks): 2023 wk21 0.01%, wk20 0.01%, wk19 0.01%, wk18 0.01% for the site.
- 5. Evidence of recent increased/atypical mortalities? N
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
- 6. Any other peaks in mortality during period checked? Y
 If yes, detail: peaked at 0.66% for the site/week in week 50 2022 attributed to seal predation.
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? N/A
 If yes, detail action:
- 8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet. N/A

Treatments and Medicines Records

1. Recent treatments (see comment)?	<input type="checkbox"/>	Y
If yes, detail: <input type="text" value="Paramove TMS"/>		
If other, detail: <input type="text"/>		
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)?	<input type="text" value="Paramove TMS"/>	
If other, detail: <input type="text"/>		
6. Are medicines stored appropriately?	<input type="checkbox"/>	Y

Biosecurity Records

1. Biosecurity records available for inspection?	<input type="checkbox"/>
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any <i>increased (unexplained)</i> mortality at the site been included?	<input type="checkbox"/>
4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected been included and <i>how</i> and <i>when</i> that will be notified to Scottish Ministers?	<input type="checkbox"/>
5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status, certification if required)?	<input type="checkbox"/>
6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission of disease been covered (movement of staff, visitors, equipment, live or dead fish etc.)?	<input type="checkbox"/>
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>
If no, detail: <input type="text"/>	

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?	<input type="checkbox"/>
2. If yes, are results available for inspection?	<input type="checkbox"/>
3. Any significant results?	<input type="checkbox"/>
If yes, detail (if not detailed under recent disease problems). <input type="text"/>	

Records checked between:	<input type="text" value="25/4/23- 30/5/23"/>
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Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

	Pool/Fish No												
	Fish nos	1	2										
	Pool Group												
Stock Details	Species	SAL	SAL										
	Average weight	1.3kg	1.3kg										
	Sex												
	Water Type	SW	SW										
	Stock Origin	Merkland	Merkland										
	Facility No	CD15	CD8										

Additional Sample Information:

killed percussively

0

Total Tests assigned

0

Site No: FS0057
Case No: 2023-0209
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology



Case No: 2023-0209 Date of visit: 29/05/2023

Site No: FS0057 Inspector: [REDACTED]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
VMD	23/06/2023		

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0447	DATE OF VISIT	30/05/2023
SITE No	FS0057	SITE NAME	Corry Farm
CASE No	20230209	INSPECTOR	[REDACTED]

Inspection under the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

The above site was visited in accordance with the Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (England and Scotland) Regulations 2015

Samples were taken to be analysed for veterinary residues.

The Inspector did not observe any clinical signs associated with the listed diseases as described in the Aquatic Animal Health (Scotland) Regulations 2009.

Records

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

Medicine records were inspected and found to be adequately maintained.

Aquaculture animal and aquaculture animal product movement records were inspected and appeared to be adequately maintained.

Mortality records were inspected and found to be adequately maintained.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:



Fish Health Inspector

Date: 23/06/2023

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0210 Date of visit: 30/05/2023

Time spent on site: 30 mins Main Inspector: [Redacted]

Site No: SS0823 Site Name: Badluarach

Business No: SB0513 Business Name: Grant Campbell

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: []

Dead/weak/abnormally behaving fish present? N/A If yes, see additional information/clinical score sheet.

Clinical signs of disease observed? N/A If yes, see additional information/clinical score sheet.

Gross pathology observed? N/A If yes, see additional information/clinical score sheet.

Diagnostic samples taken? N/A

UNI/REG only - if unable to carry out intended visit detail reason below:

inactive

Additional Case Information:

Several order site with order due to expire in 2027. Site is no longer used with no stock on site and is to be made inactive. Last stock removed in Feb 2019.

Viewed site from boat with no buoys present.

Case No:	2023-0210	Date of visit:	30/05/2023
Site No:	SS0823	Inspector:	

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
REG	23/06/2023		

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0513	DATE OF VISIT	30/05/2023
SITE No	SS0823	SITE NAME	Badluarach
CASE No	20230210	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

The site was reported to be fallow at the time of the inspection and will not be restocked in the foreseeable future. Following discussions with the site manager both the site and the business, Grant Campbell, SB0513 have been deregistered

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed: [REDACTED]

Fish Health Inspector

Date: 23/06/2023

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0211 Date of visit: 30/05/2023

Time spent on site: 1 hour Main Inspector: [Redacted]

Site No: SS0894 Site Name: Little Loch Broom
Business No: SB0205 Business Name: Scot-Hatch Ltd

Case Types: 1 ECI 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): N/A Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: []

Dead/weak/abnormally behaving fish present? N If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.
Gross pathology observed? N If yes, see additional information/clinical score sheet.
Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:
[Redacted]

Additional Case Information:

Several order site (75 hectors) with order up for renewal 2025.

All natural recruitment of stock on site. No reported health issues. Harvesting in October to Dingwall for human consumption. End point testing for scallops done at Dingwall. Relocated larger stock to shallower areas of site during visit.

No mortality observed. Stock living freely on sea bed.

Movement record book not available as owner lives in France - and this is where the record book is. No movement of stock into site (natural settlement). Movements off for human consumption only.

Case No: 2023-0211 Site No: SS0894

Date of Visit: 30/05/2023

Registration/Authorisation Details

1. Business/site details summary checked by site representative?
2. Changes made to details?

Site Details (include cleaner fish for all sections)

Total No facilities	1	Facilities stocked
Species	PMA	
Age group	6 months - 8 yrs	
No Fish	24,000	
Mean Fish Wt	mixed	
Next Fallow Date (Site)	none	Next Input Date
Recent (last 4 wks) disease problems?		N
If yes, detail:		

Movement Records

1. Movement records available for inspection?
2. Date of last inspection:
3. Are records complete and correctly entered?
4. Are movement records available for dead fish and waste?
5. Are records complete and correctly entered?
6. Are health certificates for introductions (outwith GB) available?

Transport Records

1. Are any movements carried out by (or on behalf) of the business (not using a STB)?
- If yes, is there a system in place for maintenance of transportation records?

Mortality Records

1. Mortality records available for inspection?
 2. How are mortalities disposed of?
- If other detail: free living on seabed. No mortalities observed
3. Mortality records complete and correctly entered?
 4. Recent mortality (last 4 wks): none observed
 5. Evidence of recent increased/atypical mortalities?
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
-
6. Any other peaks in mortality during period checked?
- If yes, detail:
7. Have increased (unexplained) mortalities been reported to vet or FHI?
- If yes, detail action:
8. Have 'mortality events' been reported to FHI? If no, enter details on mortality events sheet.

Treatments and Medicines Records

1. Recent treatments (see comment)?

If yes, detail:

If other, detail:

2. Medicines records available for inspection?

3. Are records complete and correctly entered?

4. Are fish in a withdrawal period?

5. If yes, what treatment(s)?

If other, detail:

6. Are medicines stored appropriately?

Biosecurity Records

1. Biosecurity records available for inspection?

2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?

3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any *increased* been included?

4. Has the action that will be taken in the event that the presence or suspicion of the presence of a listed disease is detected when that will be notified to Scottish Ministers?

5. Has the health status of aquaculture animals being stocked on the farm site been covered (equal or higher health status)?

6. Have the husbandry and biosecurity measures implemented between each epidemiological unit to minimise transmission (movement of staff, visitors, equipment, live or dead fish etc.)?

7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals?

8. Have the biosecurity procedures been adequately implemented on site?

If no, detail:

Results of Surveillance

1. Has any animal health surveillance been carried out by, or on behalf of, the business?

2. If yes, are results available for inspection?

3. Any significant results?

If yes, detail (if not detailed under recent disease problems).

Records checked between:

24/4/23- 30/5/23

Inspector(s): [Redacted]

Y
N

1	No facilities inspected	1
te (Site)	natural resettlement	
Any escapes (since last visit)?		N/A

	N
24/04/2017	
	N/A
	N/A
	N/A
	N/A

	N/A
Other (detail)	
	N/A
	N/A
	N
	N/A
	N/A

[Redacted]	
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[Redacted]	<input checked="" type="checkbox"/>
[Redacted]	<input checked="" type="checkbox"/>
of (unexplained) mortality at the site	<input type="checkbox"/>
ected been included and how and	<input checked="" type="checkbox"/>
[Redacted]	<input checked="" type="checkbox"/>
[Redacted]	<input checked="" type="checkbox"/>
[Redacted] (status, certification if required)?	<input type="checkbox"/>
[Redacted] ssion of disease been covered	<input checked="" type="checkbox"/>
[Redacted]	<input checked="" type="checkbox"/>
[Redacted] nals held on site?	<input checked="" type="checkbox"/>
[Redacted]	
[Redacted]	<input checked="" type="checkbox"/>
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Case Number:	2023-0211	Site No:	SS0894
Date of Visit	30/05/2023	Inspector:	
Number of Susceptible species on site			
If no susceptible species present = LOW risk			
If susceptible species present, score for each pathogen			
		No	Yes
Susceptible to Bonamia ostrea (OED)		0	25
Susceptible to Marteilia refringens (OED, MED)		0	3
Susceptible to OshV (CGI)		0	3
			0
Sites within a tidal excursion			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			0
Live shellfish movements			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
	Frequency of movements on from equivalent zone or compartment including third country	0	10
	Number of suppliers	0	5
			10
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
	Number of destinations	0	3
			6
			6
			0
Management practices			
		None	Secure (effluent treatment)
			Unsecure (no effluent treatment)
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
	Depuration of stock from other businesses sites within MSS management area	0	2
	Depuration of stock from sites outwith MSS management area	0	4
			2
			6
			8
			0
Biosecurity			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
	Sites sharing staff and equipment	0	1
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			0
Total Risk			
0			
LOW			

Case No:	2023-0211	Date of visit:	30/05/2023
Site No:	SS0894	Inspector:	

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
ECl	23/06/2023		

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0205	DATE OF VISIT	30/05/2023
SITE No	SS0894	SITE NAME	Little Loch Broom
CASE No	20230211	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

All epidemiological units were inspected. On this occasion no samples were taken for disease analysis. The Inspector did not observe any clinical signs associated with the listed diseases as described in the Aquatic Animal Health (Scotland) Regulations 2009.

Records

The surveillance frequency category of the site was assessed as low. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every fourth year. The category of the site will be reassessed on a routine basis and updated as required.

The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

There were no aquaculture animal and aquaculture animal product movements onto site and movements off site were only for human consumption therefore there were no movement records for inspection.

No mortality had been observed on site since the last inspection by Marine Scotland.

No animal health surveillance had been carried out on behalf of the business and/or Marine Scotland since the last Marine Scotland Inspection.

The biosecurity measures plan for the site was inspected and found to be adequately maintained and implemented.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed: [REDACTED]

Date: 23/06/2023

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0212 Date of visit: 30/05/2023

Time spent on site: 30 mins Main Inspector: [REDACTED]

Site No: SS0895 Site Name: LLB
Business No: SB0205 Business Name: Scot-Hatch Ltd

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: []

Dead/weak/abnormally behaving fish present? [] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [] If yes, see additional information/clinical score sheet.
Gross pathology observed? [] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? []

UNI/REG only - if unable to carry out intended visit detail reason below:
inactive

Additional Case Information:

Fallow since March 2017. Taken out to location in boat and no equipment present. Site not going to be used again so will be inactivated. Authorisation form complete to inactivate.

Case No:	2023-0212	Date of visit:	30/05/2023
Site No:	SS0895	Inspector:	

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
REG	23/06/2023		



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0205	DATE OF VISIT	30/05/2023
SITE No	SS0895	SITE NAME	LLB
CASE No	20230212	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

The site was reported to be fallow at the time of the inspection and will not be restocked in the foreseeable future. Following discussions with the site manager both the site has been made inactive.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:

[REDACTED]

Date: 23/06/2023

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0213 Date of visit: 30/05/2023

Time spent on site: 30 mins Main Inspector: [Redacted]

Site No: SS0311 Site Name: Loch Ewe
Business No: SB0205 Business Name: Scot-Hatch Ltd

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: []

Dead/weak/abnormally behaving fish present? [] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [] If yes, see additional information/clinical score sheet.
Gross pathology observed? [] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? []

UNI/REG only - if unable to carry out intended visit detail reason below:
[]

Additional Case Information:

Site viewed from the shore and no equipment observed. No plan to reuse the site in the foreseeable future. Forms to make site inactive completed by site owner.

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	SB0205	DATE OF VISIT	30/05/2023
SITE No	SS0311	SITE NAME	Loch Ewe
CASE No	20230213	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

The site was reported to be fallow at the time of the inspection and will not be restocked in the foreseeable future. Following discussions with the site manager the site has been inactivated.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:



Fish Health Inspector

Date: 23/06/2023

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0215 Date of visit: 31/05/2023

Time spent on site: 20 mins Main Inspector: [Redacted]

Site No: FS1084 Site Name: Isle Ewe
Business No: FB0119 Business Name: Mowi Scotland Ltd

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: S CoGP MA: M-15

Dead/weak/abnormally behaving fish present? [] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [] If yes, see additional information/clinical score sheet.
Gross pathology observed? [] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? []

UNI/REG only - if unable to carry out intended visit detail reason below:
site fallow and inactive

Additional Case Information:

Last fish harvested out of the site 30/10/19 with no issues to report. Site viewed from the shore and no equipment present. No plan to reuse the site in the foreseeable future. Forms to make site inactive submitted to business correspondent.

Movement book signed and completed correctly.



FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0119	DATE OF VISIT	31/05/2023
SITE No	FS1084	SITE NAME	Isle Ewe
CASE No	20230215	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected, in accordance with the Aquatic Animal Health (Scotland) Regulations 2009.

On this occasion, the site was found to be fallow. There is no plans to use the site in the foreseeable future and documents have been submitted to inactivate the site.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:

Date: 28/06/2023

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0216 Date of visit: 29/05/2023

Time spent on site: 3 hours Main Inspector:

Site No: FS1336 Site Name: Applecross Hatchery
Business No: FB0169 Business Name: Bakkafrost Scotland

Case Types: 1 WEL 2 REP 3 4 5 6

Water Temp (°C): Thermometer No: FHI 045 completed

Observations: Region: HI Water type: F CoGP MA

Dead/weak/abnormally behaving fish present? N If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? N If yes, see additional information/clinical score sheet.
Gross pathology observed? N If yes, see additional information/clinical score sheet.
Diagnostic samples taken? N

UNI/REG only - if unable to carry out intended visit detail reason below:

Additional Case Information:

13/2/23-19/2/23 3.93% 0.3g fish fungus 124,528 Formalin treatment
1/5/23-7/5/23 6.04% 0.5g fish fungus 184728 aquasen/cress treatment
8/5/23-14/5/23 27.73% 4.5g fry 797,014 fish
15/5/23-21/5/23 10.42% 216330 fish - parr section

From mort report; "This mortality was in parr unit (separate from the fry unit detailed in wk18 mortalities). Issues with pH in water. Lag between pH buffer added and probe feedback. Changes have been made to probes and protocols for improved real time feedback to reduce lag and improve response. Mortalities in remaining stock being closely monitored and they may be culled. Discussed with [REDACTED] and he will inform APHA".

Historic mortality event from 22nd - 28th August 2022 a loss of 53.33% which affected all 8 tanks within the fry section of the site. It is believed that water supplied to the site had become contaminated prior to water intake which lead to a rise in hydrogen sulphide levels leading to significant mortality within the fry section. Following a deep clean of the sites water reserve and facilities, the site was restocked and no further issues had occurred.

Currently in the fry section 8 tanks with 1309989 fish @ 0.7g which will be ready to move to the parr section in 6 weeks. Parr section was stocked on 10th-18th April 2023 from the fry section

Peak daily mortality in parr section; 8/5/23 34500 2.52%, 9/5 83768 6.26%, 10/5 134352 10.76%, 11/5, 140576 12.61%, 12/5 148919 15.29%, 13/5 96505 11.7% 14/5, 86693 11.9%, 15/5 107932 16.82%, 16/5 17234 3.23%.

Records checked and adequately maintained; site details, mortality records and health surveillance records.

In the parr section the prob monitoring the PH is placed just after caustic soda or bicarbonate soda is added. This results is the readings from this probe jump up and down so the cut off from this probe has been over-ridden. There are 8 tanks in the cycle but only 4 were stocked at the time of the incident. 10 cycles prior to this one with no issues. 24/5/23 TMS used to cull remaining stock due to compromised (burnt) gills.

Health reports from 15/5/23 from Pharmaq; gills evidence of lamellar surface damage with adhesions, hyperplasia and lamellar fusion. Epithelial cell necrosis/apoptosis and detachment sometimes associated with debris containing filamentous bacteria and lower numbers of large segmented filamentous bacteria like organisms. Hyperplastic filament thickening and clubbing. All fish showed eosinophilic or hyaline globular inclusions within kidney and splenic macrophages. Post acute gill pathology may indicate recent irritant or toxic gill lamellar surface damage.

Poxvirus results from 12/5/23 - PCR 5/5 positive Ct values range 23.5-26.9

Cycle consists of; Tanks-probes- drum filter- biofilter - doser- probes- tanks - Also concrete mixing tank which had a thick biofilm above the water line but below the water lie was stripped clean. Thought combination of caustic soda and bicarbonative soda may have removed the biofilm into the system.

Teams meeting 8/6/23

10/4/23 1.85 million input. Development issues in batch. Unusual behaviour, spiralling, inappetence and grumbling mortality. – Stock also at Couldoran with similar issues. Reason undetermined but not thought to be a disease issue from test conducted. Landcatch Hebridean strain.

8/5/23 1.3 million fish on site -Sudden mortality due to gill insult with gill pathology.

11/5/23 1 million fish on site. Significant mortality, gill lamellae exposed to something. Necrotic, swelling, fish unresponsive, some fungus. Still considered an opportunity for recovery so salinity increased for fungus to 2ppt.

H2S levels up slightly after the event thought to be due to dead biological material loading.

15/5/23 PCR gill pox virus with low CT values. – Gill pox often present but can be significant if stress in population – considered 2ndry.

16/5/23 Mortality continuing – further gill samples in healthy and moribund fish result still considerable gill swelling with a slight improvement.

18/5/23 600,000 fish on site. Small improvement but generally at the population level poor improvement. – welfare of population decision to cull all stocks.

PH stabilising using Bicarbonate soda or Caustic soda (finer margin for error but will not interfere with CO2 at high biomass). Bicarb is added manually, caustic with a dosing pump set up for 8 tanks but fish only stocked into four due to development issue early on in cycle. Caustic soda the preferred stabiliser but had run out so switched to Bicarb briefly then returned to Caustic soda.

2 probes.

One immediately after dosing and before tanks – to close to dosing therefore readings fluctuate and therefore ignored.

One after tanks -. Not giving the true readings of levels in the tanks

Mitigation- the dosing point will be moved to before drum filter. Biofilm – not thought to be the issue. Tanks will be restocked mid July.

Inspection conducted in association with two APHA vets.

Case No: 2023-0216

Date of visit: 29/05/2023

Site No: FS1336

Inspector: [Redacted]

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
WEL, REP	28/06/2023		

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0169	DATE OF VISIT	29/05/2023
SITE No	FS1336	SITE NAME	Applecross Hatchery
CASE No	20230216	INSPECTOR	[REDACTED]

Inspection under the Aquatic Animal Health (Scotland) Regulations 2009

The above site was inspected in conjunction with veterinary officers from the Animal and Plant Health Agency (APHA) following the report of a significant mortality at the site by the operators.

The section of the site where the mortality event had occurred was fallow as the fish remaining had been culled.

A separate report will be issued by the Animal and Plant Health Agency.

Records

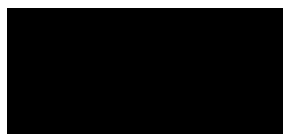
The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated. The following records were also inspected to ensure that the conditions of authorisation for your Aquaculture Production Business (APB) are being met:

Mortality records were inspected and found to be adequately maintained. Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

Reports detailing the results of animal health surveillance carried out by or on behalf of the business and/or Marine Scotland were available for inspection.

Please contact myself or the duty inspector should you require any further information or have any queries regarding this report.

Signed:



Fish Health Inspector

Date: 28/06/2023

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at <https://www.gov.scot/publications/fish-health-inspectorate-service-charter/>

Case No: 2023-0283 Date of visit: 31/05/2023

Time spent on site: 1 hour Main Inspector: [Redacted]

Site No: FS1362 Site Name: Applecross Smolt Unit 2
Business No: FB0169 Business Name: Bakkafrost Scotland

Case Types: 1 REG 2 [] 3 [] 4 [] 5 [] 6 []

Water Temp (°C): [] Thermometer No: [] FHI 045 completed []

Observations: Region: HI Water type: F CoGP MA: []

Dead/weak/abnormally behaving fish present? [] If yes, see additional information/clinical score sheet.
Clinical signs of disease observed? [] If yes, see additional information/clinical score sheet.
Gross pathology observed? [] If yes, see additional information/clinical score sheet.
Diagnostic samples taken? []

UNI/REG only - if unable to carry out intended visit detail reason below:
new site in construction.

Additional Case Information:

Applecross 3 new sites

Applecross Smolt Unit 2- almost complete and looking to stock 2-3 weeks time from Applecross Smolt unit. Was able to inspect all the site.

Applecross ongrowing 1- will be complete in August 2023 and was able to inspect some of the site

Applecross ongrowing 2 - will not be complete until October 2024 - not able to inspect any of the site.

One transference line for all three sites - underground with no water return. Line out from each site joining I output pipe.

Smolt Unit 2 and Ongrowing 1 share a grading area separate from the sites. Ongrowing 2 will have its own grading area.

Sites will have site specific staff generally. Smolt unit 2 and ongrowing one are entered from a communal service corridor which has shared office and canteen space. Entry into the sites is via two separate rooms where PPE and disinfection will be carried out prior to entry. The rooms were available for inspection but sinks benches and storage for the PPE was yet to be added. Smolt Unit 2 and Ongrowing 1 have a one way fire door out of the site into the service corridor but these doors will only be used for emergency exit. Both sites will share a common food silo from where food will be piped into the sites. Ongrowing 2 will have a separate food silo.

Each site will have a mort disposal cone which Morts will be tipped into and pumped to a mort disposal tank off site from where morts will be pumped into tankers for disposal. Destination not determined yet.

The plan is to grow the fish on site to 450g with an estimate of 10 million fish capacity once all three sites are running.

Vaccination will be carried out prior to input at Hatcher 2 and ongrowing 1 and 2.

All three sites will be full recirculation Smolt 2; 4 tanks 1185m cubed, Ongrowing 1; 2300m cubed, Ongrowing 2; 2300m cubed.

- Info on site separation, connectivity and movement of staff and fish between different areas/sites. Is access only from separate external doors to each site? Or are there internal doors/passages for moving between sites? Are there any fire escape routes which compromise site separation and biosecurity?

Fish will be moved on from the Applecross Hatchery for ongrowing at Applecross smolt unit and Ongrowing 1 and 2.

Ongrowing 2 is not build and is due for completion in October 2024. I therefore recommend that authorisation for this site is considered at a later date when the site can be assessed. From conversations it seems that the site will be totally separate from smolt unit 2 and Ongrowing 1 although attached.

Smolt unit 2 and Ongrowing 1 are physically septate with floor to ceiling walls. They will share a service corridor which will include shared canteen and office facilities however to access each of the sites you will need to pass through one of two PPE/disinfection rooms on either side of the service corridor. One for each site. In addition each site will have a emergency exit which will operate one way from the site into the service corridor. I was informed this would not routinely be used and only used in emergencies.

At the time of inspection the PPE/disinfection rooms were empty but I was informed disinfection points, PPE storage facilities and sinks would be put in place prior to stocking. The emergency exits were operating as a two way door but I was informed this will also be changed to a one way door with the standard fire door bar on one side. My inspection of Ongrowing 1 was limited as it is still a building site – due for completion in August 2023. I was able to view the shared service corridor and two of the tanks. I was not able to access the water treatment area for Ongrowing 1. I was informed staff would generally be assigned to work at only one site.

There is also a second area that serves the two sites. A communal grading area which is accessed externally and can supply fish to either Smolt unit 2 or ongrowing 1.

Provided the sites are operated as described I saw no risk of cross contamination between the two sites.

• Info on waste water flow, is it in closed or open drains (any potential for aerosols?) and does it flow through different sites or all directly off each site before joining (if joined) for waste water treatment

Each site has a separate facility for processing the water in the recirculation system, i.e. a separate room with drum filters, biofilters and UV, etc.

Water is all removed underground with no risk of back flow or open drains running from one site to the other.

• What are the biosecurity and disinfection procedures for staff, PPE or equipment moving between sites?

Staff will be site specific generally and site specific PPE will be available in each of the disinfection access rooms. This PPE will be removed on leaving the sites and not worn in the communal canteen facility or anywhere else outside the site.

Equipment will not be moved between sites. I was unable to assess the disinfection procedures as they were not in place at the time of my visit.

• Are sites in separate buildings or one building with separating walls? Are the separating walls floor to ceiling and watertight?

The sites are in the same building separated by a service corridor. The walls to each site are sealed and water tight.

• What are the biosecurity procedures and storage for feed, particularly if in a shared facility.

Smolt unit 2 and Ongrowing 1 will share a feed silo separate from the sites and the food is piped into the respective sites.

• Biosecurity for mortality removal from sites and processing/storage facility. Are mortalities transferred through adjoining sites and is there any risk of biosecurity breach? Each of the sites has its own mortality cone where morts are deposited and pumped to a separate storage facility for collection by tankers. No obvious risk of biosecurity breaches.

No report issues - site now authorised

Case No: **2023-0283** Date of visit: **31/05/2023**

Site No: **FS1362** Inspector: **[Redacted]**

Results Summary	Freq.	Date of Notification						
		Database	Insp	Phone	Insp	Writing	Insp	2 nd Insp

Report Summary			
Case Type	Date	Insp	2 nd Insp
No report	30/06/2023		