

Case No: 2022-0557 Date of visit: 09/11/2022

Time spent on site: 45mins Main Inspector:

Site No: SS0931 Site Name: Oyster Holding Room
Business No: SB0556 Business Name: The Roslin Institute

Case Types: 1 REG 2 3 4 5 6

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

Observations: Region: LO Water type: S CoGP MA:

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

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

**Additional Case Information:**

When the site is stocked, animals are kept in buckets and a water change is conducted weekly using natural seawater collected from St Abbs Marine Station. They have a small inlet just offshore and the water is pumped onshore and collected from the station. It is stored in a large water tank on site which is set up as a recirculation unit that is independent from the oyster buckets. It is filtered down to 1 micron and is passed through a UV filter before being used for water changes.

Waste water removed from the buckets is stored in a separate bin that is disinfected with sodium hypochlorite for 24hrs prior to disposal via mains sewage.

Where the storage tank is located within the room, there is a bunded container which the tank sits on which is capable of holding the volume of the tank should it leak.

The room is also divided into a dry and wet area. The dry side is for disposable PPE which is then discarded into the clinical waste bin within the room.

Mortalities are disposed of via the Universities approved route for clinical waste, which is incineration at another location on campus (but off site).

Site has received stock from Guernsey since the last inspection. Site manager produced a letter from the FHI confirming that a health certificate was not required due to the closed containment of the site and the high biosecurity measures that are in place.

Case No: 2022-0557

Site No: SS0931

Date of Visit: 09/11/2022

Inspector(s):

**Registration/Authorisation Details**

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

**Site Details (include cleaner fish for all sections)**

Total No facilities	6	Facilities stocked	0	No facilities inspected	6
Species	N/A				
Age group					
No Fish					
Mean Fish Wt					
Next Fallow Date (Site)	Currently fallow.	Next Input Date (Site)	Unsure.		
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: 31/03/2021
- 3. Are records complete and correctly entered?  Y
- 4. Are movement records available for dead fish and waste?  N/A
- 5. Are records complete and correctly entered?  N/A
- 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)
- If other detail: Mortalities are incinerated at another location on campus (but off site).
- 3. Mortality records complete and correctly entered?  Y
- 4. Recent mortality (last 4 wks): Site has been fallow since August 22.
- 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?  N
- If yes, detail:
- 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"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

**Biosecurity Records**

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
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"/>	N
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="31/03/2021 - 09/11/2022"/>
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Case Number:	2022-0557	Site No:	SS0931
Date of Visit	09/11/2022	Inspector:	
<b>Number of Susceptible species on site</b>			
If no susceptible species present = <b>LOW</b> 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
<b>Sites within a tidal excursion</b>			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			0
<b>Live shellfish movements</b>			
		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
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
<b>Management practices</b>			
		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
<b>Biosecurity</b>			
	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
			0
<b>Total Risk</b>			51
			<b>HIGH</b>



# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0556	<b>DATE OF VISIT</b>	09/11/2022
<b>SITE No</b>	SS0931	<b>SITE NAME</b>	Oyster Holding Room
<b>CASE No</b>	20220557	<b>INSPECTOR</b>	

### 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.

#### Records

The surveillance frequency category of the site was assessed as high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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:

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.

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:

Date: 15/11/2022

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: 2022-0558 Date of visit: 09/11/2022

Time spent on site: 1hr Main Inspector:

Site No: SS0941 Site Name: Disease Challenge Room 02.050
Business No: SB0556 Business Name: The Roslin Institute

Case Types: 1 REG 2 3 4 5 6

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

Observations: Region: LO 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:
Site currently fallow.



**Additional Case Information:**

Animals are only moved into this room when disease challenge work is ongoing, so this site doesn't hold stock as such.

The site records mortalities, however, due to the nature of the site and the fact the animals are intentionally challenged with different diseases, the mortalities (although high) are explained. Disease challenge work generally lasts 2 weeks and mortality attributed to infection with disease is expected to be ~60/70%.

Mortalities are disposed of via the Universities approved route for clinical waste and are incinerated at another location on campus (but off site).

Either live oysters or tissue samples are placed in wells with 200ml of seawater, sealed then placed in a plastic bag which is then disinfected with Virkon before moving into the disease challenge room. Once in the DC room, the well tray is placed within an extractor hood when the virus is either injected into the tissue or added to the water surrounding the live oyster. The welltray is then sealed in a plastic bag and placed into a lockable incubator for the duration of the experiment.

Once the disease challenge work has been completed, the oysters are removed from the incubator and placed in the hood for everything to be disinfected with Virkon before being sealed in another plastic bag which is also disinfected and tagged with a tracking marker before being stored in a lockable freezer until enough waste is generated. At which point, the waste is disposed of in clinical waste and marked for incineration which is completed at another location on campus, but off site.

The DC room is lockable while work is ongoing and there is an electronic register of personnel using the room.

Case No: 2022-0558

Site No: SS0941

Date of Visit: 09/11/2022

Inspector(s):

**Registration/Authorisation Details**

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

**Site Details (include cleaner fish for all sections)**

Total No facilities	1	0	No facilities inspected	1
Species	N/A			
Age group				
No Fish				
Mean Fish Wt				
Next Fallow Date (Site)	Currently fallow.	Next Input Date (Site)	Unsure.	
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: 31/03/2021
- 3. Are records complete and correctly entered?  Y
- 4. Are movement records available for dead fish and waste?  N/A
- 5. Are records complete and correctly entered?  N/A
- 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)
- If other detail: Mortalities are incinerated at another location on campus (but off site).
- 3. Mortality records complete and correctly entered?  Y
- 4. Recent mortality (last 4 wks): Site has been fallow since August 22.
- 5. Evidence of recent increased/atypical mortalities?  N/A
- 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: Mortality during experimental work is around 60-70%, but is explained due to intentional infection with pathogen.
- 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)?	
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 <i>increased (unexplained)</i> mortality at the site 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 been included and <i>how</i> and <i>when</i> 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, certification if required)?	
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.)?	
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	
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:	31/03/2021 - 09/11/2022
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Case Number:	2022-0558	Site No:	SS0941
Date of Visit	09/11/2022	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	25
Susceptible to Marteilia refringens (OED, MED)	0	3	3
Susceptible to OshV (CGI)	0	3	3

**Sites within a tidal excursion**

	1	2-5	>6	
Site contacts	Number of sites holding susceptible species within a tidal excursion			0

**Live shellfish movements**

	0	1-2	>3	
Movements on	Frequency of movements on from equivalent MS			0
	Frequency of movements on from equivalent zone or compartment including third country			0
	Number of suppliers			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas			0
	Frequency of movements off <u>outwith</u> MSS Management Areas			0
	Number of destinations			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
	Depuration of stock from other businesses sites within MSS management area			0
	Depuration of stock from sites outwith MSS management area			0

**Biosecurity**

	Number of sites	1	2 or 3	≥ 4	
Contacts with other sites	Sites operating from single shorebase				0
	Sites sharing staff and equipment				0
		Yes		No	
	Disinfection of equipment between sites, use of footbaths etc			0	2

**Total Risk**

<b>33</b>
<b>HIGH</b>



# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0556	<b>DATE OF VISIT</b>	09/11/2022
<b>SITE No</b>	SS0941	<b>SITE NAME</b>	Disease Challenge Room 02.050
<b>CASE No</b>	20220558	<b>INSPECTOR</b>	

### 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.

#### Records

The surveillance frequency category of the site was assessed as high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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:

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.

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:

Date: 15/11/2022

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: 2022-0559 Date of visit: 09/11/2022

Time spent on site: 1hr Main Inspector:

Site No: SS0917 Site Name: John Muir Building
Business No: SB0544 Business Name: Heriot Watt University

Case Types: 1 REG 2 3 4 5 6

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

Observations: Region: LO Water type: S CoGP MA:

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

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

**Additional Case Information:**

Site is used as part of the restocking program in the Dornoch Firth. Oysters are collected from Loch Craginish (SS0935), Little Loch Broom (SS0877) and Loch Ryan (SS0456) and are transported to site where they are cleaned and depurated. 1% of the population is selected for qPCR screening for *Bonamia*, *Martellia* and OSHV prior to release of any animals into the Dornoch Firth.



Case No:  Site No:

Date of Visit:  Inspector(s):

**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	<input type="text" value="6"/>	Facilities stocked	<input type="text" value="0"/>	No facilities inspected	<input type="text" value="6"/>
Species	<input type="text" value="N/A"/>				
Age group	<input type="text"/>				
No Fish	<input type="text"/>				
Mean Fish Wt	<input type="text"/>				
Next Fallow Date (Site)	<input type="text" value="Currently fallow."/>		Next Input Date (Site)	<input type="text" value="Wk46 22"/>	
Recent (last 4 wks) disease problems?	<input type="text" value="N"/>		Any escapes (since last visit)?	<input type="text" value="N"/>	
If yes, detail:	<input type="text"/>				

**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:
- 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)?	<input type="checkbox"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

**Biosecurity Records**

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
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"/>	N
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:	19/02/2020 - 09/11/2022
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Case Number:	2022-0559	Site No:	SS0917
Date of Visit	09/11/2022	Inspector:	
<b>Number of Susceptible species on site</b>			
If no susceptible species present = <b>LOW</b> 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
			25
			3
			0
<b>Sites within a tidal excursion</b>			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			0
<b>Live shellfish movements</b>			
		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
			3
			6
<b>Management practices</b>			
		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
			0
			0
<b>Biosecurity</b>			
	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
			0
			2
			0
<b>Total Risk</b>			<b>38</b>
			<b>HIGH</b>



## FISH HEALTH INSPECTORATE VISIT REPORT

### SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0544	<b>DATE OF VISIT</b>	09/11/2022
<b>SITE No</b>	SS0917	<b>SITE NAME</b>	John Muir Building
<b>CASE No</b>	20220559	<b>INSPECTOR</b>	

#### 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.

#### Records

The surveillance frequency category of the site was assessed as high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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:

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.

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:

Date: 15/11/2022

Fish Health Inspector

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Case No:  Date of visit:

Time spent on site:  Main Inspector:

Site No:  Site Name:   
 Business No:  Business Name:

Case Types: 1  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:

**Additional Case Information:**

w/b 14/11/2022 2170 (1.4%) fungus, w/b 7/11/2022 1634 (1.0%) fungus, w/b 4/7/2022 9879 (1.1%) post transfer

Fish vaccinated 27/10/2022, touch of fungus in the stock post vaccine. Formalin treatments being administered.

Some fungus evident during inspection.

Case No:  Site No:

Date of Visit:  Inspector(s):

**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	<input type="text" value="20"/>	Facilities stocked	<input type="text" value="6"/>	No facilities inspected	<input type="text" value="20"/>
Species	<input type="text" value="SAL"/>				
Age group	<input type="text" value="2022"/>				
No Fish	<input type="text" value="176,677"/>				
Mean Fish Wt	<input type="text" value="82g"/>				
Next Fallow Date (Site)	<input type="text" value="Feb to May 2023"/>		Next Input Date (Site)	<input type="text" value="May/June 2023"/>	
Recent (last 4 wks) disease problems?			Any escapes (since last visit)?	<input type="text" value="N"/>	
If yes, detail:	<input type="text" value="Touch of fungus"/>				

**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:

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)?  y

If yes, detail: TMS Aquacen (formalin)

If other, detail: [redacted]

2. Medicines records available for inspection?  Y

3. Are records complete and correctly entered?  Y

4. Are fish in a withdrawal period?  Y

5. If yes, what treatment(s)? Aquacen TMS

If other, detail: [redacted]

6. Are medicines stored appropriately?  Y

**Biosecurity Records**

1. Biosecurity records available for inspection?  y

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

3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any *increased (unexplained)* mortality at the site been included?  Y

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 *how* and *when* that will be notified to Scottish Ministers?  Y

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

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.)?  Y

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

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

If no, detail: [redacted]

**Results of Surveillance**

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

2. If yes, are results available for inspection?

3. Any significant results?

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

Records checked between: 27/7/2021 to 17/11/2022

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	1-20	21-35										
Pool Group												
Species	SAL	SAL										
Average weight	60g	60g										
Sex	N/A	N/A										
Water Type	FW	FW										
Stock Details												
	Stock Origin	Kintail	Kintail									
Facility No	4	17										



Case Number:	2022-0564	Site No:	FS0375	Insp:		
Date of Visit	17/11/2022	<b>No of movements/supp./dest.</b>			<b>Score</b>	
<b>Live fish movements</b>		<b>0</b>	<b>1-5</b>	<b>6-10</b>	<b>&gt;10</b>	
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14	0
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26	0
	Number of suppliers	0	5	10	14	0
Movements off	Frequency of movements off	0	3	6	10	10
	Number of destinations	0	3	6	10	6
<b>Exposure via water</b>	<b>Site contacts</b>	<b>0</b>	<b>1-5</b>	<b>6-10</b>		
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0				
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4		2
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6		
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8		
<b>Management practices</b>		<b>None</b>	<b>Secure</b>	<b>Unsecure</b>		
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2		0
On farm processing within the rules of the directive	No on farm processing	0				0
	Processing own fish (re-cycling risk)	1				
	Processing fish from MS of equivalent status	2				
	Processing fish from zone or compartment of equivalent status	4				
	Processing fish from Category III farm	8				
	Processing fish from Category V farm	10				
Disposal of fish and fish by-products	Site's own waste only processed.	0				0
	Common processes with other farms	3				
	Collection point for waste from other farms	5				
Use of unpasteurised feeds	No feeding of unpasteurised feed	0				0
	Feeding unpasteurised feed	5				
<b>Biosecurity</b>	<b>Number of sites</b>	<b>1</b>	<b>2 or 3</b>	<b>≥ 4</b>		
Contacts with other sites	Sites operating from single shorebase	0	1	2		0
	Sites sharing staff and equipment	0	1	2		
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
<b>CoGP/Regulator</b>						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
<b>Total Rank</b>					<b>18</b>	<b>MEDIUM</b>

Case No: **2022-0564**

Site No: **FS0375**

**Sea Lice Inspection (Seawater Sites Only)**

1. Has the site experienced sea lice problems in the previous 4 years?
2. Is the CoGP Farm Management Area (or equivalent) followed synchronously on a single year class basis?
3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?  
If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
11. Has any other action been taken (where applicable)?
12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
13. Are treatments, where conducted, carried out in cooperation between participating farms?
14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

**Containment Inspection**

1. Has the site experienced equipment damage due to predators in the current or previous production cycles?  N
  2. Are measures in place to mitigate against the predation experienced on site? (Detail below)  Y
- Top nets                      tensioned nets
- If other, detail below:
3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?  N  
If Yes proceed with questions 4 – 9. If No skip to question 10
  4. Have these been reported to Scottish Ministers?
  5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
  6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
  7. Were methods (if any) used to recover escapees? If yes give detail
  8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
  9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
  10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)  Y

Site No: FS0375
Case No: 2022-0564
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology





# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0224	<b>DATE OF VISIT</b>	17/11/2022
<b>SITE No</b>	FS0375	<b>SITE NAME</b>	Loch Damph
<b>CASE No</b>	20220564	<b>INSPECTOR</b>	██████████

### 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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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:

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.

No mortality levels exceeding the reporting criteria have been recorded since the last inspection.

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.

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

Medicine records were inspected and found to be adequately maintained.

R04



Samples were taken to be analysed for veterinary residues.

### **Inspection under the Aquaculture and Fisheries (Scotland) Act 2007**

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007 with respect to section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory.

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

Signed:



Date: 05/12/2022

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: 2022-0567 Date of visit: 09/11/2022

Time spent on site: 1.5 Hours Main Inspector: [Redacted]

Site No: FS0264 Site Name: Inverpolly  
Business No: FB0132 Business Name: Finfish Ltd

Case Types: 1 MIX 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:  
[Redacted]

**Additional Case Information:**

Site inspection and paper work conducted by [REDACTED], supervised by [REDACTED].

VMD feed mixing inspection conducted, no issues raised.

Case No:  Site No:   
 Date of Visit:  Inspector(s):

**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	<input type="text"/>	Facilities stocked	<input type="text"/>	No facilities inspected	<input type="text"/>
Species	SAL				
Age group	2023				
No Fish	417,000				
Mean Fish Wt	80g				
Next Fallow Date (Site)	Nov / Dec 2022	Next Input Date (Site)	January 2023		
Recent (last 4 wks) disease problems?		Any escapes (since last visit)?			
If yes, detail: <input type="text"/>					

**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:   
 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)?	<input type="checkbox"/>	N
If yes, detail: <input type="text"/>		
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"/>	N
5. If yes, what treatment(s)?	<input type="text"/>	
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="31/05/2021 - 09/11/2022"/>
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Case No: 2022-0572 Date of visit: 22/11/2022

Time spent on site: 3 hours Main Inspector: [Redacted]

Site No: FS1260 Site Name: Sound of Harris  
Business No: FB0398 Business Name: Loch Duart Ltd

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

Water Temp (°C): 12.2 Thermometer No: T173 FHI 045 completed [ ]

Observations: Region: WI Water type: S CoGP MA: None

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:**

Stock origin: Landcatch/Hendrix Genetics  
Input of stock onto site: Wk12 2022

**Treatment history:**

First SLICE treatment was conducted in June (14-21/06/2022). Increase in gill health issues on site appearing in September promoted first H<sub>2</sub>O<sub>2</sub> treatment from 02-07/10/2022 and 19-20/10/2022. FW treatments have been conducted between these with a duration of 3 hours. Planned H<sub>2</sub>O<sub>2</sub> treatment in Wk47.

Health Issues: AGD identified on site in September following potential environmental damage which was emphasised by histology reports. Mild PRV diagnosed, as well as Branchiamonas cysticola, PGD and Tenacibaculum maritum. October health visits conducted routine health screening. Following continued issues, continued high levels of PGD and AGD were reported on 27/11/2022 by health reports with last internal visit being on 15/11/2022.

2022: June, 6; August, 605 (due to freshwater treatment); September, 54; October, 95; November, 15.  
Wrasse on site sourced locally or from Isle of Skye (all wild caught). Wrasse movement records were also inspected.

Site visit: first set of 10 pens inspected. Pens 7 and 8 are the pens with the highest mortality in this first set. ~20 moribund and lethargic fish were seen around the sides of the pens worst affected, many of which were exhibiting gasping behaviour. On the second set of 10 pens, pen 13, 17 and 18 were the most affected pens. During the inspection two pens were seen receiving Paramove 50 treatments. Current plan on site is to conduct Paramove 50 treatments on all the pens in the next week fews, should weather allow. AGD is noted as the primary cause of mortality on site. Company biologist and cleanerfish coordinator on site supervising treatments. Wrasse are only creel out during FW treatments, but hides allow for wrasse to seek shelter during H<sub>2</sub>O<sub>2</sub> treatments. Wrasse were seen in all of the pens and appeared to be healthy. All fish sampled were moribund and lethargic.



Case No:  Site No:

Date of Visit:  Inspector(s):

**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	<input type="text" value="20"/>	Facilities stocked	<input type="text" value="20"/>	No facilities inspected	<input type="text" value="20"/>
Species	<input type="text" value="SAL"/>	<input type="text" value="WRS"/>			
Age group	<input type="text" value="S1 2022"/>	<input type="text" value="wild caught"/>			
No Fish	<input type="text" value="367,700"/>	<input type="text" value="10,493"/>			
Mean Fish Wt	<input type="text" value="1kg"/>	<input type="text" value="mix"/>			
Next Fallow Date (Site)	<input type="text" value="Autumn 2023"/>		Next Input Date (Site)	<input type="text" value="04/2024"/>	
Recent (last 4 wks) disease problems?			<input type="text" value="Y"/>	Any escapes (since last visit)?	<input type="text" value="N"/>
If yes, detail:	<input type="text" value="AGD issues on site, environmental insult primary cause."/>				

**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:

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)?  Y

If yes, detail: H2O2,  
T.M.S.

If other, detail:

2. Medicines records available for inspection?  Y

3. Are records complete and correctly entered?  Y

4. Are fish in a withdrawal period?  Y

5. If yes, what treatment(s)? T.M.S.

If other, detail:

6. Are medicines stored appropriately?  Y

**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 (unexplained)* mortality at the site 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 been included and *how* and *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, certification if required)?

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.)?

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

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?  Y

2. If yes, are results available for inspection?  Y

3. Any significant results?  Y

If yes, detail (if not detailed under recent disease problems).  
September diagnosed AGD, PGD, and low level PRV on site by Pharmaq.

October internal sampling found and observed severe levels of AGD and PGD as well as positive for Brachiomonas sp.

Records checked between: 06/10/2022-22/11/2022

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/Pool - click**

Pool/Fish No	F1	F2	F3	F4	F5							
Fish nos	1	2	3	4	5							
Pool Group												
Species	SAL	SAL	SAL	SAL	SAL							
Average weight	1kg	1kg	1kg	1kg	1kg							
Sex	N/A	N/A	N/A	N/A	N/A							
Water Type	SW	SW	SW	SW	SW							
Stock Details		Ormsary Smolt Unit (FS0575)	Ormsary Smolt Unit (FS0575)	Clachbreac (FS0375)	Clachbreac (FS0375)	Clachbreac (FS0375)						
	Stock Origin											
Facility No	7	7	8	8	8							



Case no: **2022-0572**

Site No: **FS1260**

Method of killing: **Percussive**

Date of visit: **22/11/2022**

Inspector(s): **[REDACTED]**

Sheet Relevant: **Y**

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

Fish Number		1	2	3	4	5				
Time sampled after death (if > 45 minutes)										
External Signs										
Behaviour	Moribund	S	S	S	S	S				
	Lethargic	S	S	S	S	S				
	Hanging vertical									
	Spiralling									
	Flashing									
Body	Loss of equilibrium		W			W				
	Dark	W	W	W	W	W				
	Distended abdomen									
	Anorexic									
Opercula	Scale Oedema									
	Shortened									
Haemorrhaging	Flared									
	Throat									
Eyes	Ventrum									
	Base of fins									
	Elsewhere									
	Exophthalmic									
Gills	Enophthalmic (sunken)									
	Cataract									
	Haemorrhagic									
Lesions	Pale									
	Zoned	W								
Vent	Necrotic									
	Flank									
Lice Load	Elsewhere									
	Estimate numbers	0	0	0	0	0				
Internal Signs										
Ascites	Inflamed									
	Clear									
Oedema	Bloody									
	In tissues									
Heart	Pale/anaemic									
	Granulomas									
	Deformed			W						
Liver	Petechial haem									
	Gross haem									
	Tissue breakdown									
	Enlarged									
	Colour number(s)									
Pyloric caeca	Granulomas									
	Lesions									
	Petechial haem									
Spleen	Tubules mauve									
	Lack of fat									
Gut	Enlarged									
	Granulomas									
	No food present	S	S	S	S	S				
Body wall	Yellow pseudo-faeces	S	S	S	S	S				
	External haem									
	Internal haem									
Swim bladder	Haemorrhaging									
	Fluid filled									
Kidney	Haemorrhaging									
	Swollen									
	Grey									
	Granular									
General	Liquefied									
	Parasites present									
	Anaemia									



Additional comments:

Site No: FS1260
Case No: 2022-0572
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology







# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0398	<b>DATE OF VISIT</b>	22/11/2022
<b>SITE No</b>	FS1260	<b>SITE NAME</b>	Sound of Harris
<b>CASE No</b>	20220572	<b>INSPECTOR</b>	██████████

### Section 1: Summary

The above site was inspected following reports of increased mortality by the farm operator. During the physical inspection of all pens, five fish were removed from diagnostic sampling.

Histopathology examination revealed mild to moderate, multifocal hyperplastic branchitis associated to gill health issues and vascular disturbance. Epitheliocystis (likely *Ca. Branchiomonas cisticola*) and amoebic gill disease (AGD) were also observed. F3 also displayed lesions that could be related with the presence of gill poxvirus. Gill lesions could also be associated with environmental factors/water insults. Hepatic necrosis, mild peritonitis (likely associated with vaccine administration) and mild multifocal myocarditis also observed.

All fish tested positive for *Neoparamoeba perurans* (amoebic gill disease), *Paranucleospora theridion* and salmon gill poxvirus by qPCR. One fish tested positive for infectious pancreatic necrosis (IPNV) by qPCR.

An *Aeromonas sp.* and a *Vibrio sp.* were identified on plates taken from gill material of all fish. The level and purity of growth would suggest they are likely to be of environmental origin and not present as primary fish pathogens.

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

Following 8 weeks of notification of increased mortality above the reporting threshold, a site inspection was conducted. Approximately 20 moribund and lethargic fish were observed around the sides of pens with pens 7 and 8 being worst affected, many of which were exhibiting gasping behaviour. Minimal lice numbers were observed on site. Gill appearance/condition was varied in fish removed for inspection and subsequently sampling. The majority of the gills were observed to have very minimal white lesions but their overall shape and condition was normal. Only one fish was observed with slightly paler and ununiform shape. In addition, on the day of the inspection, two pens were observed receiving Paramove 50 treatments.

All sampled fish were lethargic and moribund. Only one fish had zoned gills. Internally, yellow pseudofaeces was present in the hind gut of all fish sampled.

R09

## Samples

Samples were collected from five fish according to the table below:

Fish number	Facility number	Species	Stage	Origin
1-2	7	Atlantic salmon	1kg 2022 S1	Ormsary Smolt Unit (FS0575)
3-5	8	Atlantic salmon	1kg 2022 S1	Clachbreac (FS0375)

## Results

**Bacteriology:** Kidney and gill F1 to F5 inoculated onto appropriate media for the isolation of bacteria.

The following bacteria was isolated from gill material in F1-F5:

- *Aeromonas sp.*
- *Vibrio sp.*

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

### Infectious pancreatic necrosis virus (IPNV)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	-	-	-	-	NEGATIVE
F2	-	-	-	-	NEGATIVE
F3	-	-	-	-	NEGATIVE
F4	-	-	-	-	NEGATIVE
F5	20.46	35.81	36.33	37.75	POSITIVE

### Salmon gill pox virus

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	19.66	30.13	30.22	30.06	POSITIVE
F2	18.84	25.05	24.85	25.14	POSITIVE
F3	19.08	21.36	21.41	21.62	POSITIVE
F4	18.45	25.11	25.15	24.79	POSITIVE
F5	19.39	29.83	30.09	29.92	POSITIVE

R09

The samples tested negative for infectious haematopoietic necrosis virus (IHNV), infectious salmon anaemia virus (ISAV), salmonid alphavirus (SAV), viral haemorrhagic septicaemia virus (VHSV) 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).

*Neoparamoeba perurans* (AGD)

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	19.66	26.40	26.41	26.58	POSITIVE
F2	18.84	24.28	24.17	24.42	POSITIVE
F3	19.08	23.63	23.81	23.88	POSITIVE
F4	18.45	25.99	26.19	25.93	POSITIVE
F5	19.39	26.40	26.48	26.54	POSITIVE

*Paranucleospora theridion*

Fish Number	Endogenous control Cp value	Cp Values			Reported Result (PCR)
F1	19.66	26.93	26.98	26.94	POSITIVE
F2	18.84	24.75	24.80	24.97	POSITIVE
F3	19.08	26.17	26.20	26.24	POSITIVE
F4	18.45	23.69	23.50	23.68	POSITIVE
F5	19.39	25.60	25.68	25.69	POSITIVE

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

Histopathological examination revealed the following:

Gill: Lamellar hyperplasia and fusion, mild to moderate, multifocal, lamellar necrosis, mild, multifocal (F4 & F5) and vascular disturbance (F2 & F5). Presence of several amoeboid cells resembling *Neoparamoeba perurans* (F1-F5) and few basophilic epithelial inclusions (likely epitheliocystis) (F2, F3, F4, F5). Features of nuclear karyiorhexis in the lamellar epithelial cells and cell apoptosis were also observed F3.

Skin & Muscle: Within normal range.

Heart: Minimal to mild, multifocal myocarditis (F1,F3). Mild epicarditis (F1, F5).

Gut and pyloric caeca: Peritonitis, mild (potentially associated with vaccine administration) (F1, F2, F3, F4).

Pancreas: within normal range.

Liver: hepatocellular necrosis, mild, multifocal (F2, F3, F4, F5) and haemorrhage (F2, F5) and hepatocellular vacuolation (macrovisicules), mild, diffuse (F2).

R09

Kidney: Interstitial cell (haemopoietic) necrosis very mild, multifocal (f5), several renal tubules displaying hyaline droplet observed in all fish.

Spleen: Some cuffing (F3, F4, F5).



Signed:

Date: 08/12/2022

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/>

FHI Diagnostic Sampling Photos: Sound of Harris (FS1260)



Figure 1 Overview of a) fish 1 and b) fish 2 sampled (pen 7).

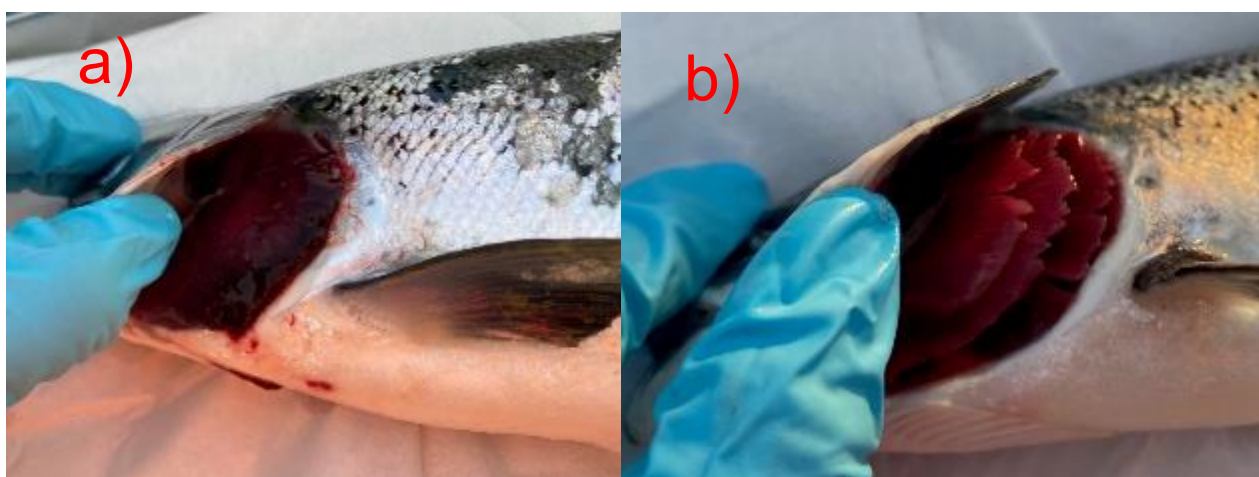


Figure 2 Gills of a) fish 1 and b) fish 2.



Figure 3 Internal view of fish 1.





Figure 4 Internal view of fish 2.



Figure 5 Overview of c) fish 3, d) fish 4 and e) fish 5 (pen 8).



Figure 6 Gills of c) fish 3 and d) fish 4.



Figure 7 Gills of fish 5



Figure 8 Internal view of fish 3





Figure 9 Internal view of fish 4.



Figure 10 Internal view of fish 5.

Case No:  Date of visit:

Time spent on site:  Main Inspector:

Site No:  Site Name:   
 Business No:  Business Name:

Case Types: 1  2  3  4  5  6

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

Observations: Region: TA 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:

**Additional Case Information:**

Accompanied and observed by [REDACTED] conducting internal FHI Audit. Site water supply for ponds and tanks has been in spate and water was silty with fish returning to feeding after spate. Fish in hatchery in good condition and supplied by borehole water which is at a constant 9oC. The odd fish in the tanks was lethargic and one had a lesion on the flank. These fish are recovering from RTFS and have been treated with Florfenicol. Vaccinating fish against ERM and Furunculosis by injection while on site. Fish were recovering from anaesthetic quickly after handling. Some moribund or sideswimming fish observed in the Nov 2021 batch of fish. Two fish from pond 3 were removed for examination and were found to have stones in the gut. This was due to having been on starve during the summer of 2022 when water temperatures were above 21oC. One moribund fish from pond 4 was removed and examined but no signs of disease were observed. The site has triple screens, bird nets and an electric fence in place to ensure containment and a disc filter to prevent issues with eye fluke. Predation from birds and otters is experienced and vermin can sometimes be observed at the site although a pest control contract is in place. Ensiled waste is disposed of at a biodigester at Turriff. There have been Florfenicol, Halamid, Cress, Formalin and TMS treatments over the year. Although procedures detail that staff have to consider the health of incoming stocks the minimum health standard was not detailed in the VHWP and was raised with site staff. 3 fish removed and sampled for residue testing. These fish were in good condition and showed no internal signs of disease.

Case No: **2022-0573** Site No: **FS0508**  
 Date of Visit: **23/11/2022** Inspector(s): **[REDACTED]**

**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	9 Ponds, 8 Tanks, 1 Hatchery	Facilities stocked				No facilities inspected		All
Species	RTR	RTR	RTR	RTR	RTR	RTR		
Age group	Sep-21	Nov-21	Jan-22	Mar-22	Sep-22	Oct-22		
No Fish	35,048	220,988	87,783	236,910	145,809	270,285		
Mean Fish Wt	262g	161g	107g	43g	0.8g	0.17g		
Next Fallow Date (Site)	Fallow by unit only			Next Input Date (Site)		January 2023		
Recent (last 4 wks) disease problems?					Y	Any escapes (since last visit)?		N
If yes, detail:	RTFS in March 2022 stock with 0.85% mortality in the last four weeks.							

**Movement Records**

- 1. Movement records available for inspection?  Y
- 2. Date of last inspection: **22/10/2021**
- 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?  Y

**Transport Records**

- 1. Are any movements carried out by (or on behalf) of the business (not using a STB)?  N
- 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? **Ensiled - on site**
- If other detail: **[REDACTED]**
- 3. Mortality records complete and correctly entered?  Y
- 4. Recent mortality (last 4 wks): **0.85 % in Mar 2022 stock, 1.4% in Nov 2021 stock, 6% in Sept 2022 stock**
- 5. Evidence of recent increased/atypical mortalities?  Y
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **[REDACTED]**
- RTFS in March 2022 stock with 0.85% morts for the month, treated with florfenicol**
- 6. Any other peaks in mortality during period checked?  Y
- If yes, detail: **RTFS in Sept 2021 stock in May/June 4.5K (3.3%) morts, Jan 2022 stock suffered 5K morts RTFS and 5K Whitespot morts in June**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI?  Y
- If yes, detail action: **Health check by vet and Florfenicol treatment, formalin treatment**
- 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:	Florfenicol									
If other, detail:										
2. Medicines records available for inspection?						<input type="checkbox"/>	Y			
3. Are records complete and correctly entered?							<input type="checkbox"/>	Y		
4. Are fish in a withdrawal period?								<input type="checkbox"/>	Y	
5. If yes, what treatment(s)?	Florfenicol									
If other, detail:	Only in March 2022 stock									
6. Are medicines stored appropriately?									<input type="checkbox"/>	Y

**Biosecurity Records**

1. Biosecurity records available for inspection?									<input type="checkbox"/>	Y	
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?										<input type="checkbox"/>	Y
3. Has the manner and period in which the APB will notify Scottish Ministers or veterinary professional of any increased ( <i>unexplained</i> ) mortality at the site been included?										<input type="checkbox"/>	Y
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"/>	Y
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"/>	N
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"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?										<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?										<input type="checkbox"/>	N
If no, detail:	Health of incoming stocks to be considered by staff but no detail of the minimum standard acceptable										

**Results of Surveillance**

1. Has any animal health surveillance been carried out by, or on behalf of, the business?										<input type="checkbox"/>	Y
2. If yes, are results available for inspection?										<input type="checkbox"/>	Y
3. Any significant results?										<input type="checkbox"/>	Y
If yes, detail (if not detailed under recent disease problems).	RTFS, Whitespot and stones in gut										
Records checked between:	22/10/21 - 23/11/2022										

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 - 3											
	Pool Group												
Stock Details	Species	RTR											
	Average weight	262g											
	Sex												
	Water Type	FW											
	Stock Origin	Troutlodge											
	Facility No	Pond 5											





Case Number:	2022-0573	Site No:	FS0508	Insp:	
Date of Visit	23/11/2022	No of movements/supp./dest.			Score
<b>Live fish movements</b>		0	1-5	6-10	>10
Movements on (from out with GB) of susceptible species	Frequency of movements on from equivalent MS	0	5	10	14
	Frequency of movements on from equivalent zone or compartment including third country	0	9	18	26
	Number of suppliers	0	5	10	14
Movements off	Frequency of movements off	0	3	6	10
	Number of destinations	0	3	6	10
<b>Exposure via water</b>	<b>Site contacts</b>	0	1-5	6-10	
Water contacts with other farms (holding species susceptible to same diseases)	Farm is protected (secure water supply through disinfection or borehole)	0			
	Farm is on-line or in a coastal zone with category I farms upstream or within 1 tidal excursion	1	2	4	1
	Farm is on-line or in a coastal zone with category III farms upstream or within 1 tidal excursion	1	3	6	
	Farm is on-line or in a coastal zone with category V farms upstream or within 1 tidal excursion	1	4	8	
<b>Management practices</b>		None	Secure	Unsecure	
Water contacts with processors	Any processing plant discharging into adjacent waters	0	1	2	0
On farm processing within the rules of the directive	No on farm processing	0			0
	Processing own fish (re-cycling risk)	1			
	Processing fish from MS of equivalent status	2			
	Processing fish from zone or compartment of equivalent status	4			
	Processing fish from Category III farm	8			
	Processing fish from Category V farm	10			
Disposal of fish and fish by-products	Site's own waste only processed.	0			0
	Common processes with other farms	3			
	Collection point for waste from other farms	5			
Use of unpasteurised feeds	No feeding of unpasteurised feed	0			0
	Feeding unpasteurised feed	5			
<b>Biosecurity</b>	<b>Number of sites</b>	1	2 or 3	≥ 4	
Contacts with other sites	Sites operating from single shorebase	0	1	2	0
	Sites sharing staff and equipment	0	1	2	1
Disinfection of equipment between sites, use of footbaths etc	Yes	0			0
	No	1			
<b>CoGP/Regulator</b>					
Practices in accordance with regulator or industry code of practice	Yes	0			0
	No	3			
Platform access to cages	Yes	0			
	No	2			
<b>Total Rank</b>					<b>29</b> <b>HIGH</b>



Case No: **2022-0573**

Site No: **FS0508**

**Sea Lice Inspection (Seawater Sites Only)**

1. Has the site experienced sea lice problems in the previous 4 years?
2. Is the CoGP Farm Management Area (or equivalent) fallowed synchronously on a single year class basis?
3. Does the site have access to a range of licenced in-feed and bath sea lice medications (including deltamethrin, azamethiphos and emamectin benzoate) as well as access to suitable biological and/or mechanical control measures, and can these be deployed in a reasonable period of time?
4. Is there a signed documented farm management agreement or statement relevant to the site and CoGP Farm Management Area (or equivalent)?
5. Are sea lice count records available for inspection? (Legal SSI, CoGP Annex 6)
6. Do records adequately reflect the required standard specified in the SSI and the CoGP? (Legal SSI, CoGP Annex 6)
7. Are sea lice (*L. salmonis*) record levels below the suggested criteria for treatment in the CoGP during the period that records are inspected? (CoGP Annex 6)
8. Have average adult female sea lice (*L. salmonis*) numbers per fish been at a level of 3 or above (prior to w/b 10/6/19) or 2 or above (from w/b 10/6/19) during the period that records are inspected?  
If yes, have these been reported to the Fish Health Inspectorate? If no, FHI see comment.
9. Is *C. elongatus* infestation at a level which is considered to cause significant welfare problems? (CoGP 4.3.81, 5.3.50)
10. Have therapeutic treatments been administered or other actions taken when *L. salmonis* levels have exceeded the suggested criteria for treatment or where *C. elongatus* is considered to have welfare implications? (CoGP 4.3.82, 5.3.51)
11. Has any other action been taken (where applicable)?
12. Have therapeutic treatments or the actions taken had a significant impact upon the lice levels recorded?
13. Are treatments, where conducted, carried out in cooperation between participating farms?
14. Is there a harvesting strategy for the site, where fewer populations or part populations are held without treatment for sea lice?
15. Is there a site specific written lice management procedure with waypoints describing set actions to deal with recognised scenarios during the escalation of a sea lice infestation?
16. Do the sea lice levels observed on stocks reflect sea lice count data? If no please detail reasons.

**Containment Inspection**

1. Has the site experienced equipment damage due to predators in the current or previous production cycles?  N
2. Are measures in place to mitigate against the predation experienced on site? (Detail below)  Y

Bird nets, Electric fence Vermin control Fencing  
If other, detail below:

3. Have escape incidents or events been experienced on or in the vicinity of the site since the last FHI inspection?  N  
If Yes proceed with questions 4 – 9. If No skip to question 10
4. Have these been reported to Scottish Ministers?
5. Have these been reported to local DSFB forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
6. Have these been reported to the SSPO and local fisheries trusts forthwith (where they exist)? (CoGP – 4.4.37, 5.4.17)
7. Were methods (if any) used to recover escapees? If yes give detail
8. If gill nets were deployed was this action agreed with local wild fish interests and was permission given by Scottish Ministers? (Legal, CoGP – 4.4.38, 5.4.18)
9. What action was taken to prevent and minimise the risk of further escapes? (Not covered in code but could be considered under satisfactory measures of the Act)
10. Is the site inspected as satisfactory with regards to containment? If no, please detail reason(s)  Y

Site No: FS0508
Case No: 2022-0573
Nature of non-compliance:
Action taken (FHI):
Non-compliance relevant to (delete): VirologyMolGen/Bacteriology/Histology/Parasitology





# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	FB0456	<b>DATE OF VISIT</b>	23/11/2022
<b>SITE No</b>	FS0508	<b>SITE NAME</b>	Kinnaird Mill Trout
<b>CASE No</b>	20220573	<b>INSPECTOR</b>	██████████

### 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 high. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted annually. 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:

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.

No mortality levels exceeding the reporting criteria have been recorded since the last inspection.

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.

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

The following point was raised with the site representative during the inspection:

- AHWP did not detail the minimum health status for source of stock as part of Biosecurity Measures Plan.

R04

Documentation demonstrating that this point had been addressed was sent to the Fish Health Inspectorate (contact details below) on 25/11/2022. This issue is now closed.

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

Medicine records were inspected and found to be adequately maintained.

Samples were taken to be analysed for veterinary residues.

**Inspection under the Aquaculture and Fisheries (Scotland) Act 2007**

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007 with respect to section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory.

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

Signed:

A black rectangular box redacting the signature of the Fish Health Inspector.

Fish Health Inspector

Date: 05/12/2022

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: 2022-0574 Date of visit: 23/11/2022

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

Site No: SS0598 Site Name: Lewis Mussels  
Business No: SB0394 Business Name: Lewis Mussels

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

Water Temp (°C): 9.6 Thermometer No: T173 FHI 045 completed [ ]

Observations: Region: WI 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:**

Site not inspected since 2015. Site does not have movement book as it has been lost prior to inspection. Site manager confirmed that mussels are not transferred between sites from relaying.

BMP available and adequate with minor edits required.

Minimal fouling seen on the lines inspected. No issues with eider ducks reported.

Case No: 2022-0574

Site No: SS0598

Date of Visit: 23/11/2022

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	5	Facilities stocked	5	No facilities inspected	5
Species	MED	MED			
Age group	2020	2021			
No Fish	3 double lines	2 double lines			
Mean Fish Wt	40mm	35mm			
Next Fallow Date (Site)	never fallow		Next Input Date (Site)	summer 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?  N
- 2. Date of last inspection: 28/07/2015
- 3. Are records complete and correctly entered?  N
- 4. Are movement records available for dead fish and waste?  N/A
- 5. Are records complete and correctly entered?  N/A
- 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?  N/A
- 2. How are mortalities disposed of? Other (detail)
- If other detail: empty shells fall to the seabed
- 3. Mortality records complete and correctly entered?  N/A
- 4. Recent mortality (last 4 wks): no increased mortality observed on site since last inspection
- 5. Evidence of recent increased/atypical mortalities?  N/A
- If yes, facility nos/no mortality per facility/no stock per facility/reason:
- 6. Any other peaks in mortality during period checked?  N/A
- If yes, detail:
- 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"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

**Biosecurity Records**

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
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"/>	N
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="28/07/2015-23/11/2022"/>
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Case Number:	2022-0574	Site No:	SS0598
Date of Visit	23/11/2022	Inspector:	
<b>Number of Susceptible species on site</b>			
If no susceptible species present = <b>LOW</b> 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
			3
			0
<b>Sites within a tidal excursion</b>			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			10
<b>Live shellfish movements</b>			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
			10
	Frequency of movements on from equivalent zone or compartment including third country	0	10
			20
	Number of suppliers	0	5
			10
			0
			0
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
			2
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
			6
	Number of destinations	0	3
			6
			0
			0
			0
<b>Management practices</b>			
		Secure (effluent treatment)	Unsecure (no effluent treatment)
		None	
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
			2
	Depuration of stock from other businesses sites within MSS management area	0	2
			6
	Depuration of stock from sites outwith MSS management area	0	4
			8
			0
			0
			0
<b>Biosecurity</b>			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
			2
	Sites sharing staff and equipment	0	1
			5
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			2
			2
<b>Total Risk</b>			
20			
<b>MEDIUM</b>			



# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0394	<b>DATE OF VISIT</b>	23/11/2022
<b>SITE No</b>	SS0598	<b>SITE NAME</b>	Lewis Mussels
<b>CASE No</b>	20220574	<b>INSPECTOR</b>	██████████

### 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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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:

Aquaculture animal and aquaculture animal product movement records were not available for inspection.

No evidence of increased or atypical mortality has 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.

The following points were raised with the site representative during the inspection:

- Movement record were not available for inspection.

This report is a reminder that any Aquaculture animal and aquaculture animal product movements on and off site must be recorded to ensure the conditions of authorisation for your Aquaculture Production Business (APB) are being met.

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

Signed:



Date: 29/11/2022

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:	<input type="text" value="2022-0577"/>	Date of visit:	<input type="text" value="23/11/2022"/>			
Time spent on site:	<input type="text" value="30mins"/>	Main Inspector:	<input type="text" value=""/>			
Site No:	<input type="text" value="SS0773"/>	Site Name:	<input type="text" value="Sgeir nan Each"/>			
Business No:	<input type="text" value="SB0394"/>	Business Name:	<input type="text" value="Lewis Mussels"/>			
Case Types:	1 <input type="text" value="ECI"/>	2 <input type="text" value=""/>	3 <input type="text" value=""/>	4 <input type="text" value=""/>	5 <input type="text" value=""/>	6 <input type="text" value=""/>
Water Temp (°C):	<input type="text" value="12.2"/>	Thermometer No:	<input type="text" value="T173"/>	FHI 045 completed	<input type="text" value=""/>	
Observations:	Region:	WI	Water type:	S	CoGP MA:	
Dead/weak/abnormally behaving fish present?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="text" value="N"/>	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="text" value="N"/>					

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

**Additional Case Information:**

Site not inspected since 2015. Site does not have movement book. Site manager confirmed that mussels are not transferred between sites from relaying.

BMP available and adequate with minor edits required.

Minimal fouling observed on site. Eider ducks have not been an issue on site.

Case No: **2022-0577** Site No: **SS0773**

Date of Visit: **23/11/2022** Inspector(s): **[REDACTED]**

**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	<b>5</b>	Facilities stocked	<b>5</b>	No facilities inspected	<b>5</b>
Species	<b>MED</b>	<b>MED</b>			
Age group	<b>2020</b>	<b>spat</b>			
No Fish	<b>2 double lines</b>	<b>2 double lines</b>			
Mean Fish Wt	<b>45mm</b>	<b>spat</b>			
Next Fallow Date (Site)	<b>never fallow</b>		Next Input Date (Site)	<b>2023 summer spatfall</b>	
Recent (last 4 wks) disease problems?			<b>N</b>	Any escapes (since last visit)?	<b>N</b>
If yes, detail:	<b>[REDACTED]</b>				

**Movement Records**

- 1. Movement records available for inspection? **N**
- 2. Date of last inspection: **28/07/2015**
- 3. Are records complete and correctly entered? **N**
- 4. Are movement records available for dead fish and waste? **N/A**
- 5. Are records complete and correctly entered? **N/A**
- 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)? **[REDACTED]**
- If yes, is there a system in place for maintenance of transportation records? **[REDACTED]**

**Mortality Records**

- 1. Mortality records available for inspection? **N/A**
- 2. How are mortalities disposed of? **Other (detail)**
- If other detail: **empty shells fall to the seabed**
- 3. Mortality records complete and correctly entered? **N/A**
- 4. Recent mortality (last 4 wks): **no increased mortality observed on site since the last inspection**
- 5. Evidence of recent increased/atypical mortalities? **N/A**
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **[REDACTED]**
- 6. Any other peaks in mortality during period checked? **N/A**
- If yes, detail: **[REDACTED]**
- 7. Have increased (unexplained) mortalities been reported to vet or FHI? **N/A**
- If yes, detail action: **[REDACTED]**
- 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"/>
If yes, detail:	<input type="text"/>
If other, detail:	<input type="text"/>
2. Medicines records available for inspection?	<input type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input type="checkbox"/>
5. If yes, what treatment(s)?	<input type="text"/>
If other, detail:	<input type="text"/>
6. Are medicines stored appropriately?	<input type="checkbox"/>

**Biosecurity Records**

1. Biosecurity records available for inspection?	<input type="checkbox"/>	Y
2. Has the manner and frequency of mortality removal, recording and safe disposal been considered?	<input type="checkbox"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
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"/>	Y
7. Is documentation available regarding the measures in place to maintain the physical containment of aquaculture animals held on site?	<input type="checkbox"/>	Y
8. Have the biosecurity procedures been adequately implemented on site?	<input type="checkbox"/>	Y
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"/>	N
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="28/07/2015-23/11/2022"/>
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Case Number:	2022-0577	Site No:	SS0773
Date of Visit	23/11/2022	Inspector:	
<b>Number of Susceptible species on site</b>			
If no susceptible species present = <b>LOW</b> 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
			3
			0
<b>Sites within a tidal excursion</b>			
		1	2-5
			>6
Site contacts	Number of sites holding susceptible species within a tidal excursion	0	2
			10
			10
<b>Live shellfish movements</b>			
		0	1-2
			>3
Movements on	Frequency of movements on from equivalent MS	0	5
			10
	Frequency of movements on from equivalent zone or compartment including third country	0	10
			20
	Number of suppliers	0	5
			10
			0
			0
			0
Movements off	Frequency of movements off <u>within</u> MSS Management Areas	0	1
			2
	Frequency of movements off <u>outwith</u> MSS Management Areas	0	3
			6
	Number of destinations	0	3
			6
			0
			0
			0
<b>Management practices</b>			
		Secure (effluent treatment)	Unsecure (no effluent treatment)
		None	
Water contacts with depuration facilities	Depuration of stock from own sites within MSS management area	0	1
			2
	Depuration of stock from other businesses sites within MSS management area	0	2
			6
	Depuration of stock from sites outwith MSS management area	0	4
			8
			0
			0
			0
<b>Biosecurity</b>			
	Number of sites	1	2 or 3
			≥ 4
Contacts with other sites	Sites operating from single shorebase	0	1
			2
	Sites sharing staff and equipment	0	1
			5
			5
		Yes	No
	Disinfection of equipment between sites, use of footbaths etc	0	2
			2
			2
			2
<b>Total Risk</b>			20
			<b>MEDIUM</b>



# FISH HEALTH INSPECTORATE VISIT REPORT

## SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0394	<b>DATE OF VISIT</b>	23/11/2022
<b>SITE No</b>	SS0773	<b>SITE NAME</b>	Sgeir nan Each
<b>CASE No</b>	20220577	<b>INSPECTOR</b>	██████████

### 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 medium. An inspection under the Aquatic Animal Health (Scotland) Regulations 2009 will be conducted every second 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:

Aquaculture animal and aquaculture animal product movement records were not available for inspection.

No evidence of increased or atypical mortality has 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.

The following points were raised with the site representative during the inspection:

- Movement record were not available for inspection.

This report is a reminder that any Aquaculture animal and aquaculture animal product movements on and off site must be recorded to ensure the conditions of authorisation for your Aquaculture Production Business (APB) are being met.

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

Signed:



Date: 29/11/2022

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: 2022-0584 Date of visit: 07/11/2022

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

Site No: SS0964 Site Name: Rastech Eden Campus (SF)
Business No: SB0569 Business Name: Rastech CIC (Shellfish)

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

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

Observations: Region: FI Water type: S CoGP MA: None

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:
[Redacted]

**Additional Case Information:**

All the businesses existing IBCs, drum filter, protein skimmer, uv, ozone etc will be transferred to this site from SS0940, which will be deregistered once decommissioned.

All effluent water is passed through a drum filter prior to collection and storage in a silo located on site, where the solid waste sinks to the bottom and is captured in a cone. The solid waste is then removed from the wastewater and is processed in an anaerobic digester before it is used as fertiliser for a hydroponics unit (also on site) for plant cultivation. The waste water is dosed with chlorine and ozone before it is discharged into mains sewage where it goes through tertiary treatment prior to discharge.

Mortalities and waste is collected in a sealed bin on site, which is expected to be collected by a licensed contractor once a year due to the low level of expected mortalities. Currently the plan is to collect fish and shellfish waste in the same bin, but this can be separated if required.

The poly tunnel sits on top of a pond liner and the bunding comes up 12" above ground within the tunnel. It is capable of holding the volume of water in the facilities should a leak or overspill occur.

The poly tunnel is separated into 2 rooms, each temperature controlled. Arctic charr in one side at an ambient temp of 12 degrees celsius, and the whiteleg shrimp in the other room at 30 degrees celsius. There were footbaths with disinfectant present at the boundary to each site. A visitor log is also available at the portacabin at the entry to the poly tunnel for visitor control. There is a changing room on entry where staff and visitors can put on PPE. There was no change of PPE between the fish and shellfish sites.

The poly tunnel is within a secure perimeter fence which is padlocked and under 24/7 CCTV monitoring. Cameras are present throughout the site.

use of alien and locally absent species in aquaculture.

- Does the facility involve the recirculation of water:

Yes.

- Do discharges not connect in any way to open waters before screening and filtering or percolation and filtering to prevent the release of solid waste into the aquatic environment:

The water in the recirculation unit passes through a drum filter and biological filter. No water is discharged from the recirc unit. All effluent water from the site is the waste water that is collected from the drum filter. This water is collected in a large silo to allow any remaining solids to separate from the wastewater. Solid waste sinks to the bottom cone where it is then removed and processed in an anaerobic digester before it is used as fertiliser for a hydroponics unit for plant cultivation (Salicornia). The waste water is dosed with chlorine and ozone before it is discharged into mains sewage where it passes through tertiary treatment.

- Are measures in place to prevent the escapes from the facility of the farmed species and non-target species that may survive and subsequently reproduce:

Yes. This is a closed recirculation unit with no water being discharged directly from the system. Water is passed through a drum filter and biological filter. All effluent water from the site is the waste water that is collected from the drum filter. This water is collected in a large silo to allow any remaining solids to separate from the wastewater. Solid waste sinks to the bottom cone where it is then removed and processed in an anaerobic digester before it is used as fertiliser for a hydroponics unit. The remaining waste water (containing no solid waste) is dosed with chlorine and ozone prior to discharge down mains drains where it goes to tertiary treatment. Site is indoors and fully bunded. Stock will be held in IBCs. If flooding were to occur, bunding is capable of holding more than the volume of water located on site. Site is surrounded by a perimeter fence is monitored with 24/7 CCTV. Site is locked when unattended.

- Are measures in place to prevent the loss of reared specimens or non-target species and other biological material, including pathogens due to factors such as predators (e.g. birds) and flooding:

Site is indoors and locked when unattended. Birds or other predators will have no access to the site. The site is bunded and is capable of holding the volume of water on site. All effluent is dosed with chlorine and ozone prior to discharge into mains.

- For predators is there predator control plan and what are the measures in place to prevent predation:

- For flooding what is the distance of the facility from open waters:  
Distance of facility to open water is ~20m, however, the site is completely bunded to contain any water due to flooding or overspill.
- Are measures in place to prevent losses of reared specimens or non-target species and other biological material, including pathogens, due to theft or vandalism:  
Site is surrounded by a perimeter fence and is monitored with 24/7 CCTV. Alarms are installed and the site is locked when unattended.
- Are dead organisms disposed of in an appropriate method:  
All mortalities and waste are collected in a sealed bin which will be collected by a third party contractor for disposal as clinical waste.
- Is transport carried out under conditions that prevent the escape of the species and any non-target species:  
Animals are transported in sealed bags within polyboxes. These are moved by site personnel using private vehicles.





## FISH HEALTH INSPECTORATE VISIT REPORT

### SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0569	<b>DATE OF VISIT</b>	07/11/2022
<b>SITE No</b>	SS0964	<b>SITE NAME</b>	Rastech Eden Campus (SF)
<b>CASE No</b>	20220584	<b>INSPECTOR</b>	██████████

An application for authorisation to farm the non-native species white leg shrimp (*Litopenaeus vannamei*) was received on the 13<sup>th</sup> September 2022.

The production facilities at Rastech Eden Campus (SF), operated by Rastech CIC (Shellfish), were inspected on 7<sup>th</sup> November 2022 to determine if an application for a permit was required under the Alien and Locally Absent Species in Aquaculture (Scotland) Regulations 2015 (“the 2015 regulations”). Movements of alien or locally absent species to facilities meeting the definition of a ‘closed aquaculture facility’ are exempt from the permit process by these Regulations, provided that transport is carried out under conditions that prevent the escape of those species and any non-target species.

It was determined that the facilities and their current operation met the requirements of a closed aquaculture facility under Article 3(3) of Council regulation (EC) No 708/2007. The transport methods proposed were deemed to be acceptable with regards to containment and prevention of escape.

Operational activities included:

- Site access through a locked entrance to prevent unauthorised entry from persons, predators or vermin;
- Aquaculture conducted in a recirculation system;
- The facilities will only be stocked with *Litopenaeus vannamei* (white leg shrimp);
- Waste water is passed through a drum filter prior to discharge for tertiary treatment;
- Mortalities are removed daily and stored in a bio-secure manner prior to disposal;
- Mortalities will be collected by an approved waste contractor for biosecure disposal;
- Transportation of stock into the site is conducted in sealed bags within sealed boxes, with all water associated with the transport discharged into the recirculating system;
- All materials associated with transport are disinfected prior to disposal;
- An auditable record of stock and product transfers is maintained;
- Stock will be euthanized on site and disposed of using an approved waste contractor;
- No live animals will be transported out of the facility.

The Rastech Eden Campus (SF) site, will not require to apply for a permit to introduce alien species under Council Regulation (EC) No 708/2007 due to the facilities currently being regarded as meeting the requirements of a closed aquaculture facility and the transport of the alien species being conducted under conditions that will prevent their escape.

R10

**Rastech CIC (Shellfish) are reminded that should there be any change to the current operational practices at the Rastech Eden Campus (SF), this may result in the requirement for a permit under the 2015 Regulations. To ensure compliance with the 2015 Regulations these changes must be discussed with the Fish Health Inspectorate prior to being implemented.**

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



Signed:

Date: 23/11/2022

Fish Health Inspector

The Fish Health Inspectorate Service Charter detailing standards of service is available on the Marine Scotland website at [www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter](http://www.gov.scot/Topics/marine/Fish-Shellfish/FHI/charter)

Case No: 2022-0586 Date of visit: 22/11/2022

Time spent on site: N/A Main Inspector: [Redacted]

Site No: SS0823 Site Name: Badluarach  
Business No: SB0513 Business Name: Grant Campbell

Case Types: 1 PSI 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:**

The site is unlikely to be stocked again, authorisation form signed to make site inactive.

The last stock was removed from this site 18/02/2019 and it has not been restocked.

The easterly wave action on this site causes the scallops to hunker down and not feed effectively. They grow shell to protect themselves and appear to use their own meat as a source of energy to achieve this, therefore the meat yield at shucking is reduced. Although scallops can recover their meat weight quite quickly the site was again hit by sustained easterly gales in November 2018 and of course the lack of food in the water left the scallops in poor condition until their food source returned in spring 2019.



Case No:

Site No:

Date of case:

Inspector(s):

Business/site contacts correct? (if no, update site summary sheet)

**Site Details**

Total No facilities:	<input type="text" value="Several Order"/>	No facilities stocked:	<input type="text" value="Fallow"/>
Species	<input type="text"/>	<input type="text"/>	<input type="text"/>
Age group	<input type="text"/>	<input type="text"/>	<input type="text"/>
No shellfish	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mean fish Wt	<input type="text"/>	<input type="text"/>	<input type="text"/>
Next fallow date (site)	<input type="text" value="Currently fallow"/>	Next input date (site)	<input type="text" value="No inputs planned"/>

Date of last inspection: (ECI or PSI):

1. Any recent increased or atypical mortalities? (last 4 weeks):

If yes, detail:

2. Any increased mortalities? (since last inspection)

If yes, detail:

3. How are mortalities disposed of?

If other detail:

4. Are there any diseases on your site?

If yes, detail:

5. Have you experienced predation on site?

If yes, detail:

6. Has the site experienced increased or abnormal fouling?

If yes, detail:

7. Have you observed any invasive species on your site?

If yes, detail:

8. Do you have an up to date BMP, and are there any issues?

If yes, detail:

9. What quantity of spat fall have you had in the last 12 months? (mussel sites only):





## FISH HEALTH INSPECTORATE VISIT REPORT

### SUMMARY FOR INFORMATION OF SITE OPERATOR

<b>BUSINESS No</b>	SB0513	<b>DATE OF VISIT</b>	21/11/2022
<b>SITE No</b>	SS0823	<b>SITE NAME</b>	Badluarach
<b>CASE No</b>	20220586	<b>INSPECTOR</b>	[REDACTED]

#### **Routine surveillance frequency assessment under the Aquatic Animal Health (Scotland) Regulations 2009**

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

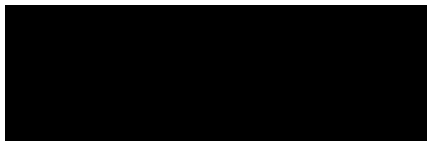
The information required for the public record of aquaculture production businesses regarding this site was verified and where necessary updated.

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.

No mortality levels exceeding the reporting criteria have been recorded since the last inspection.

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

Signed:



Date: 23/11/2022

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/>