

Case No: 2023-0292 Date of visit: 05/07/2023

Time spent on site: 7 Hrs Main Inspector:

Site No: FS0248 Site Name: Loch Duich
Business No: FB0119 Business Name: Mowi Scotland Ltd

Case Types: 1 ECI 2 CNI 3 SLI 4 5 6

Water Temp (°C): 13.3 Thermometer No: T148 FHI 045 completed N/A

Observations: Region: HI Water type: S CoGP MA: M-21

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

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

Additional Case Information:

Records checked on 05/07/2023 (2 hours on site) while physical inspection of stock was carried out 06/07/2023 (5 hours on site).

Routine inspection brought forward after site reported after one fish (Atlantic salmon) sampled during monthly health check came back positive for BKD through histology and preliminary PCR test. Inspector was informed by a member of the health team that the fish that had been sampled for pre-transfer screen were mort's so may have been dead for a day or two prior to sampling. Site has not seen any increase in mortality numbers with mortality levels over the last 4 weeks being between 0.08% to 0.15% per week across the whole site and no pens showing increased mortalities in comparison to other pens. Main cause of current mortalities has been via runts and gill issues via increased numbers of micro jellyfish on site. Visibility was not good due to run off from recent heavy rain but fish could be seen responding well to feed and shoaling as expected. A large number of mackerel were observed outside the pens.

On average 3 moribund fish were removed per pen but no darkening of the skin, distended abdomens, blisters or haemorrhaging around the vent were observed. All fish removed were poor doers and from marks on the heads had suffered from concussion. Internal examination of all fish was also carried out with no gross pathology observed. The 8 healthy fish removed for vmd sampling were also examined and again showed no signs of disease. By the time of arrival on site the company had already arranged for an ensiler at the shore base and a net cleaner to only be used at the site inspected.

Cleaner fish mort's. from 05/06/23 - 05/07/2023 - Lumpfish 4676 (4.53%), wrasse 1327 (7.8%). The mortality numbers over this time period has been consistent over all 12 pens showing no trends or peaks noted. Only mort's from inspected site are processed at the shore base.

No treatments carried out on current cycle so far. TMS used on site weekly but just for carrying out sea lice counts. Only treatments during the previous cycle were physical sea lice treatments.

Cleanerfish movements have been kept separately but are available and satisfactory. In future all movements (salmon and cleanerfish) will be kept in the same movement record book.

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Date of Visit: **05/07/2023** Inspector(s): **[REDACTED]**

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	12	Facilities stocked	12	No facilities inspected	12
Species	SAL LUM	WRS			
Age group	2023 Q2 2022/23	wild caught			
No Fish	864,789 103,000	17,000			
Mean Fish Wt	655g ~50-60g	unknown			
Next Fallow Date (Site)	Oct/Nov. 2024		Next Input Date (Site)	~March 2025	
Recent (last 4 wks) disease problems?			N	Any escapes (since last visit)?	N
If yes, detail:	[REDACTED]				

Movement Records

- 1. Movement records available for inspection? **Y**
- 2. Date of last inspection: **27/07/2021**
- 3. Are records complete and correctly entered? **N**
- 4. Are movement records available for dead fish and waste? **Y**
- 5. Are records complete and correctly entered? **Y**
- 6. Are health certificates for introductions (outwith GB) available? **N/A**

Transport Records

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

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): **Wk 23 - 796 (0.09%), wk 24 - 667 (0.08%), wk 25 - 758 (0.09%), wk 26 - 1259 (0.15%); see add. Info for cleanerfish**
- 5. Evidence of recent increased/atypical mortalities? **N**
- If yes, facility nos/no mortality per facility/no stock per facility/reason: **[REDACTED]**
- 6. Any other peaks in mortality during period checked? **N**
- 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. **Y**

Treatments and Medicines Records

1. Recent treatments (see comment)?	<input type="checkbox"/>	Y
If yes, detail: TMS		
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)?	<input type="checkbox"/>	TMS
If other, detail:		
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 <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:		

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).		BKD detected in 1 fish by PCR and histopathology samples recently taken under a routine health screen.

Records checked between:	27/07/2021 - 05/07/2023
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Case no: Site No: Date of visit/
Sampling:

Priority samples: VI BA PA MG HI

Time sampling starts/ends: Inspector: VMD No.

Environmental conditions: 1 2 3 4 5

Summary samples HIST BA MG VI PA Total Samples

Add Fish/Pools - click

Pool/Fish No												
Fish nos	1-2	3-4	5-6	7-8								
Pool Group												
Species	SAL	SAL	SAL	SAL								
Average weight	0.6500	0.6500	0.6500	0.6500								
Sex	N/A	N/A	N/A	N/A								
Water Type	SW	SW	SW	SW								
Stock Details		Arkaig (FS0649)	Arkaig (FS0649)	Arkaig (FS0649)	Arkaig (FS0649)							
	Stock Origin											
Facility No	1	6	10	11								

Case Number:	2023-0292	Site No:	FS0248	Insp:		
Date of Visit	05/07/2023	No of movements/supp./dest.			Score	
Live fish movements		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	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	3
Exposure via water	Site contacts	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		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		
Management practices		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				
	Processing own fish (re-cycling risk)	1				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				
Biosecurity	Number of sites	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		0
Disinfection of equipment between sites, use of footbaths etc	Yes	0				0
	No	1				
CoGP/Regulator						
Practices in accordance with regulator or industry code of practice	Yes	0				0
	No	3				
Platform access to cages	Yes	0				0
	No	2				
Total Rank					16	MEDIUM

Case No: **2023-0292**

Site No: **FS0248**

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?
- 2. Are measures in place to mitigate against the predation experienced on site? (Detail below)

Tensioned SealPro Nets, Top 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?
- 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)

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Inspector: [REDACTED]

Point of Compliance

1. Is the farm under inspection located within a farm management area?

If N, no further questions require completion.

Points of Compliance for Both Farm Management Agreements and Statements

2. Has a current farm management agreement or statement (FMAg/S) been prepared?

3. Is the current FMAg/S available for inspection?

4. Does the FMAg/S identify the relevant farm management area?

5. Does the FMAg/S identify the fish farm site(s) to which it applies?

6. Does the FMAg/S identify the date of commencement of the agreement or statement?

7. Does the FMAg/S identify the date of review?

Arrangements for Fish Health Management

8. Does the FMAg/S identify the minimum health standards for the stocks to be introduced to the area or farm?

9. Does the FMAg/S identify the vaccination requirements for stocks held in the area or farm?

10. Does the FMAg/S identify the species of fish which may be stocked into the area or farm?

11. Does the FMAg/S identify the maximum stocking density of any pen on any farm in the area or the individual farm?

12. Does the FMAg/S identify the arrangements for the storage and disposal of any dead fish from any fish farm in the area or the individual farm?

Arrangements for The Management of Sea Lice

13. Does the FMAg/S identify arrangements for the sharing of data on sea lice numbers and treatments?

14. Does the FMAg/S identify the availability and the use of medicines on farms covered by the agreement of statement?

15. Does the FMAg/S identify any requirements for the sensitivity testing of available treatments for sea lice on farms in the area or individual farms?

16. Does the FMAg/S identify the circumstances under which biological controls and cleaner fish are to be used on farms in the area or individual farms?

17. Does the FMAg/S identify the arrangements for synchronous treatments on farms within the area?

Live Fish Movements

18. Does the FMAg/S identify the circumstances when live fish may be introduced or removed from the area or farm?

19. Does the FMAg/S identify the arrangements for the movement of live fish on and off sites in the area or individual farms?

Harvesting

20. Does the FMAg/S identify acceptable harvest practices on farms in the area or individual farms?

Fallowing

21. Does the FMAg/S identify the dates by which the area or individual farm will be fallow and the earliest date when a farm or area may be restocked?

22. Does the FMAg/S identify whether one or more year classes may be stocked onto sites covered by the agreement or statement?

23. Does the FMAg/S identify whether broodstock or potential broodstock are to be kept on any site covered by the agreement or statement?

Point of Compliance for Farm Management Agreements Only

24. Does the farm management agreement include arrangements for persons to become, or cease to be, parties to the agreement?

Management and operation

25. Is the fish farm being managed and operated in accordance with the agreement or statement?

26. What is the version no/date of issue of the FMAg/S?



Site No: FS0248
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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

BUSINESS No	FB0119	DATE OF VISIT	05 & 06/07/2023
SITE No	FS0248	SITE NAME	Loch Duich
CASE No	20230292	INSPECTOR	██████████

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 found to be inadequately maintained.

Mortality records were inspected and found to be adequately maintained.

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.

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

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:

- FS numbers must be recorded in the source/destination section of the movement record book, to allow for better traceability of stocks. It was discussed with the site representative that this would be recorded in future. No further action is required.

These must be addressed to ensure the conditions of authorisation for your Aquaculture Production Business (APB) are being met.

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.

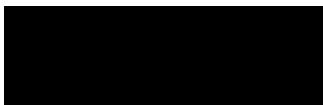
Inspection under the Aquaculture and Fisheries (Scotland) Act 2007

The site was also inspected in accordance with the Aquaculture and Fisheries (Scotland) Act 2007, as amended, with respect to section 3 regarding parasites (sea lice), section 4A regarding fish farm management agreements and statements and section 5 regarding containment and escapes.

On this occasion the site was found to be satisfactory with regards to parasites, fish farm management agreements and statements and containment and escapes.

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

Signed:



Date: 11/07/2023

Fish Health Inspector

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