

**Delegated or Committee Planning Application Report and Report of Handling as required by Schedule 2 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 relative to applications for Planning Permission or Planning Permission in Principle**

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<b>Reference No:</b>	20/01345/MFF
<b>Planning Hierarchy:</b>	Local Application
<b>Applicant:</b>	MOWI Scotland Ltd.
<b>Proposal:</b>	Formation of fish farm (Atlantic Salmon) incorporating twelve 120m circumference circular cages and siting of feed barge
<b>Site Address:</b>	North Kilbrannan Fish Farm, North of Cour Bay, Kilbrannan Sound, East Kintyre

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### **SUPPLEMENTARY REPORT NO. 3**

#### **1.0 INTRODUCTION**

The purpose of this report is to update Members of a late consultation response from NatureScot and the implications of this response. This report also updates on the Scottish Government's Vision for Sustainable Aquaculture. This report also provides advice on the latest policy position in relation to this planning application in light of the updated status of proposed Local Development Plan 2, and also to advise Members of late and withdrawn representations, consultee responses and supporting information from the applicant which have been received after the application was presented to PPSL committee on 24<sup>th</sup> May 2023.

#### **2.0 CONSULTATION RESPONSE FROM NATURESCOT**

NatureScot advise that within the last week they received two new documents that were not considered in their updated HRA (issued to the Council on the 23rd May 2023). These are as follows:

- Wild fish monitoring data (2021-2022) collected as part of the Carradale North and South Fish Farm Environmental Management Plan (EMP). This was issued by MOWI (the Applicant) and received by NatureScot and Argyll and Bute Council at noon on Wednesday 23rd August 2023.

Wild fish monitoring results carried out as part of the EMP for the operational Carradale North and South fish farms (approximately 8 km south of the Proposal). This data includes lice levels on wild caught sea trout in Carradale Bay, Kintyre. NatureScot consider that there could be a potential risk that requires further consideration.

- An unpublished summary of the second year (2022) of salmon smolt tracking data from the Firth of Clyde. This was received by NatureScot at 13:15 on Friday 25th August 2023.

The results of this indicate that of the 75 smolts which were detected at or beyond Cumbrae, six were recorded in the Kilbrannan Sound, which represents 8% of these smolts. NatureScot wish to highlight that in 2021 (the first year of this study), no tagged salmon smolts from the Endrick Water SAC were detected in the Kilbrannan Sound and that was the basis on which their original appraisal was made.

NatureScot consider that this new information is material to their appraisal of the implications of this Proposal on the Endrick Water SAC and therefore has the potential to influence their conclusions and subsequent advice to Argyll and Bute Council.

They have highlighted this urgent matter so that the Council has the opportunity to take account of this prior to the planning Hearing on Tuesday 29<sup>th</sup> August. NatureScot further note that if planning committee were minded to delay the determination of this Proposal, NatureScot would undertake a review of this new information and provide an updated HRA to Argyll and Bute Council accordingly.

Officer Comment: NatureScot have provided advice to Argyll and Bute Council to assist with the conclusions of an Appropriate Assessment (AA) relating to the Endrick Water SAC. The Council as competent authority are required to undertake AAs for European protected sites before planning permission can be approved in order to ensure that there is no reasonable scientific doubt as to the effects of the proposed development. This new information casts doubt on the advice provided by NatureScot on this issue and it is, therefore, considered that the Council would be unwise to proceed to determine this planning application until such time as NatureScot have had an opportunity to fully consider this new information and update their advice to the planning authority.

In these circumstances, it is now recommended to Members that the Hearing is adjourned to allow time for NatureScot to update their advice to the planning authority in the light of the new information received. A copy of NatureScot's letter dated 28<sup>th</sup> August 2023 is appended to this report.

### **3.0 VISION FOR SUSTAINABLE AQUACULTURE**

Since the publication of the Report of Handling in May 2023, the Scottish Government has published its "Vision for Sustainable Aquaculture" in July 2023. This document sets out the vision for the aquaculture sector and states "The Scottish Government supports the development of a sustainable aquaculture sector, operating within environmental limits and recognises the considerable social and economic benefits the sector delivers today and can deliver in the future." It sets out a vision for Scotland's blue economy that recognises that economic prosperity and well-being are embedded within nature, and in order to harness blue opportunities, Scotland's economy and society must be transformed to thrive within the planet's sustainable limits. The blue economy includes the marine, coastal and the inter-linked freshwater environment of Scotland, the different marine and maritime sectors it supports, and the people connected to it. Whilst this document represents a material consideration in the determination of this planning application it does not change the recommendation on this proposal. The full document is published online: [Vision for Sustainable Aquaculture - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/consultation-papers/collections/documents/Vision-for-Sustainable-Aquaculture-2023.pdf)

### **4.0 IMPLICATIONS OF PLDP 2 AS RECOMMENDED TO BE MODIFIED BY THE EXAMINATION REPORT**

The provisions of S.25 of the Town and Country Planning (Scotland) Act 1997 set out that when making a decision under the Planning Acts, the decision maker is required to have regard to the development plan, and that the determination should be in accordance with that plan unless material considerations indicate otherwise.

The current development plan remains National Planning Framework 4 and the Argyll and Bute Local Development Plan 2015.

However, the provisions of PLDP2 (as modified by Examination) now have enhanced status as the most recent expression of policy by the Council and having reached an advanced stage in the Development Plan preparation process. However, a limited element of uncertainty does remain because further process is required to firstly secure approval of the Council for the modifications, and then the subsequent approval of Scottish Ministers is required prior to formal adoption. Whilst it is by no means certain that PLDP2 will eventually be adopted the advanced stage of the Development Plan process would suggest that this is likely; as the plan preparation process has reached a point that has concluded its extensive public consultation and review by the DPEA no further modification of significance is permissible and as such it is appropriate to consider the implications of this proposed updated policy position when assessing current applications.

It is therefore important to identify if there is any significant difference between the aims and requirements of the current development plan and PLDP2 (as modified by Examination) and, in cases where such conflict arises, to identify whether the provisions of PLDP2 indicate that an alternative outcome might be justifiable as a departure to the provisions of the current development plan.

It is considered that the following policies from pLDP2 would apply to this proposal:

Policy 4 – Sustainable Development

Policy 14 – Bad Neighbour Development

Policy 15 – Supporting the Protection, Conservation and Enhancement of Our Historic Built Environment.

Policy 16 – Listed Buildings

Policy 19 – Scheduled Monuments

Policy 28 – Supporting Sustainable Aquatic and Coastal Development

Policy 63 – Waste Related Development and Waste Management

Policy 73 – Development Impact on Habitats, Species and Biodiversity

Policy 74 – Development Impact on Sites of International Importance

## **5.0 ASSESSMENT**

The assessment of this proposal against PLDP2 as recommended to be modified by the Examination Report is as follows:

Policy 04: Sustainable Development: Promotes the principles of sustainable development and remains generally aligned with the requirements of ABC LDP STRAT 1 and NPF 4 Policies 1 and 2 which have already been applied to the assessment of this matter. No substantive change to previous assessment.

Policy 14: Bad Neighbour Development: Sets out that the Council will resist proposals that would have an unacceptable impact on the amenity of neighbouring land uses. The policy goes on to list the criteria that require to be considered. Policy 14 is aligned with Policy SG

LDP BAD 1 which has already been considered in the main report. No substantive change to previous assessment.

Policy 15: Supporting the Protection, Conservation and Enhancement of Our Historic Built Environment: Sets out that development will not be supported where it fails to protect, conserve or enhance the special characteristics and/or cultural significance of the historic built environment, or to avoid any cumulative effect upon the integrity or special qualities of heritage assets. Policy 15 is aligned with the aims of NPF4 Policy 7 and ABC LDP 2015 Policy LDP 3 which have already been applied to the assessment of this matter. No substantive change to previous assessment.

Policy 16: Listed Buildings: Sets out requirements for development which affects a listed building or its wider setting. The aims of Policy 16 are aligned with the aims of NPF4 Policy 7 and ABC LDP 2015 Policy LDP 3 which have already been applied to the assessment of this matter. No substantive change to previous assessment.

Policy 19 – Scheduled Monuments: Sets out that there is a presumption against development that does not retain, protect, conserve or enhance a Scheduled Monument. The aims of Policy 19 are aligned with the aims of NPF 4 Policy 7 and ABC Policies LDP3 and SG LDP ENV 19 which have already been applied to the assessment of this matter. No substantive change to previous assessment.

Policy 28 – Supporting Sustainable Aquatic and Coastal Development: This is the main policy for the assessment of new aquaculture developments within LDP2. It maintains a similar criteria based approach to NPF 4 Policy 32 and LDP Policies LDP 4 and SG LDP AQUA 1. No substantive change to previous assessment.

Policy 63 – Waste Related Development and Waste Management: Set out the requirements that developments need to make for the storage, separation, recycling, composting and collection of waste. The aims of Policy 63 are aligned with the aims of NPF 4 Policy 12 and LDP Policies LDP 10 and SG LDP SERV 5b.

Policy 73 – Development Impact on Habitats, Species and Biodiversity: This policy seeks to protect habitats, species and biodiversity in relation to legislation, policies and conservation objectives. The aims of Policy 73 are aligned with the aims of NPF 4 policies 3,4 and 32 and LDP Policies SG LDP ENV 1 and LDP AQUA 1.

Policy 74 – Development Impact on Sites of International Importance: This policy resists development which would have a significant adverse effect upon existing or proposed Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) or Ramsar Sites. Where there are likely significant effects Appropriate Assessment are required. The aims of Policy 74 is aligned with NPF 4 policies 3, 4 and 32 and LDP policies LDP 3, LDP 5 and SG LDP AQUA 1.

## **6.0 ADDITIONAL REPRESENTATIONS**

### **Objections**

The Planning Authority received a further representation from:

Friends of the Sound of Jura (FOSOJ) dated 26<sup>th</sup> May 2023.

Rachel Mulrenan, Wildfish dated 7<sup>th</sup> August 2023.

Harry Nickerson c/o Cour Ltd., Cour, Carradale, Campbeltown PA28 6QL dated 17<sup>th</sup> August 2023.

John Aitchison dated 18<sup>th</sup> August 2023 and 26<sup>th</sup> August 2023.

John Ford, Chairman, Lochranza & Catacol Community Association dated 24<sup>th</sup> August 2023.

**FOSOJ** contend that the Report of Handling unreasonably dismisses the third party modelling provided by MTS-CFD Ltd, which shows that the cumulative impact of sea lice from multiple farms in the Greater Clyde poses a significant risk of harm to wild salmon, including the salmon population of the Endrick Water SAC.

FOSOJ advise that the Council is obliged to protect the SAC's salmon population from harm, beyond reasonable scientific doubt and they content that the MTS-CFD Ltd's modelling results shows that such doubt exists. They feel that the report on handling for the proposed farm has dismissed the MTS-CFD Ltd modelling on the basis of the advice received from Marine Scotland Science, a statutory consultee.

FOSOJ further advise that "Mowi is correct that there is as yet no standard protocol for modelling sea lice dispersal in Scotland, and no standard method for presenting the results. This is why you must be extremely cautious in accepting the results of one source of modelling, particularly when that comes from the applicant. You have been presented with two credible and equally valid sources of sea lice modelling. There is clearly uncertainty about the risk to the Endrick Water SAC salmon population. This cannot be safeguarded beyond reasonable scientific doubt by consenting this farm. You should apply the precautionary principle."

EMPs do not provide the council with an effective means of monitoring and mitigating the adverse interactions between farm reared salmon and wild salmonids.

None of the EMPs imposed as planning conditions by any LPA has yet altered the management of a single salmon farm.

Lice density should be tested by sentinel cage experiments (counting sea lice on captive fish, caged at sea), as it is in Norway, but that has not been done in the Greater Clyde, so instead the Kilbrannan Sound EMP relies on catching wild sea trout to count their lice. Monitoring sea lice in this way is notoriously difficult. In addition, sea trout can return to freshwater to rid themselves of high lice burdens.

There is also no way to attribute sea lice found on wild sea trout to individual farms, so farm operators will no doubt refuse to take responsibility for lice numbers high enough to do harm. Only modelling can attribute sea lice in the sea to individual farms, but the council has no access to independent sea lice modelling for this purpose.

There is no mechanism for the EMP's monitoring plan of the status of the salmon population of the Endrick Water SAC to affect farm management at North Kilbrannan, Mowi's other farms or any of the other farms in the Greater Clyde. How can there be when there is no mechanism in the EMP to attribute the sea lice impacts on that population to individual farms or to all the farms?

"Given the above, the salmon population of the SAC cannot be adequately protected by only allowing the farm to be restocked until after an end of production cycle review, since Argyll and Bute Council lacks the necessary data and mechanisms for adaptive management techniques to be able to address the cumulative risk to wild fish.

In addition, most farms in the Greater Clyde do not have EMPs and they cannot be imposed retrospectively.

This is not an enforceable framework to ensure that any elevated risk to the Atlantic Salmon feature of the Endrick Water SAC can be mitigated before any adverse effect on site integrity can occur."

“In addition, it is categorically untrue, as NatureScot says in the European Site proforma it sent to you on 24th May 2023 that the operation of the proposed North Kilbrannan fish farm will not result in a change to the distribution of the species within the site of the Endrick Water due to the physical separation distance between the SAC and the fish farm.

The physical separation of the farm and the SAC has nothing to do with it as the harm will be done to the SAC's salmon as they migrate through the Firth of Clyde.

Please urgently clarify this with NatureScot.”

“It is not precautionary to consent this development in the hope that SEPA's new regulatory framework will be able to deal with it later. SEPA has not finished its consultation on the new framework but it has already said that its modelling method is intended for risk screening only. It does not include the vertical movement of sea lice for example, so it cannot fully model the risk from multiple farms.

Instead SEPA intends to require fish farm companies to provide their own detailed modelling for consenting purposes. Why would they do that after a farm is consented, except when they were confident that their own modelling would disprove that their farms were capable of doing harm.

This assessment must be made independently of the farm operators and SEPA seems unwilling to make itself capable of doing it.

There is reasonable scientific doubt about long-term harm occurring to the SAC's salmon population, and insufficient cause to believe that adaptive management can mitigate the cumulative risk.

Until SEPA's new framework is in place and proven to be capable of more than risk screening, the council should recommend refusal of the North Kilbrannan application and other fish farm expansion in the Greater Clyde.”

Officer Comment: Further input, summarised below, has been sought and received from the relevant consultees in respect of the issues raised by FOSJ.

**Scottish Government's Marine Directorate (formerly Marine Scotland Science) (dated 30/6/22):** Advice provided by SGMD should be considered in full and within the context presented. Comments taken out of context may lead to misinterpretation of SGMD advice.

Following the request for additional advice by Argyll and Bute Council, we can advise that the additional modelling information provided shows that both Mowi and FoSoJ's simulations generate elevated lice concentrations over considerable areas during the simulation period.

In the case of the Mowi model, this elevated concentration is in excess of 0.1 lice m<sup>2</sup> and stretches over a considerable distance from mid Loch Fyne to halfway down Arran. This model also shows the prevalence is close to 1. This value is assumed to be a lice concentration at which low level mortality on smolts can be being induced by sea lice.

In the case of the FoSoJ submission, this provided two figures of modelled distributions for the average sea lice density over a 24 day period (6/05- 30/5). There is no information on the prevalence, however the relative patterns of high and low density from FoSoJ model and Mowi model appear to be similar.

**NatureScot (dated 2/8/23):** In this instance, the Conservation Objective (CO) relating to the distribution of species within the site only applies for proposals for works within the SAC such as the installation of weirs etc. This CO is in place to ensure that salmon can continue

to access all parts of the SAC that they have done so historically for spawning and/or so that smolts can then migrate back to the sea. Please note that I have confirmed this position with one of our European Site advisors.

**Wildfish** wish to raise further concerns about the research cited in NatureScot's Habitats Regulations Appraisal (HRA). NatureScot claims that this HRA supports the assertion that the new farm at North Kilbrannan, if approved, would not beyond reasonable scientific doubt negatively impact on wild salmon from the Endrick Water Special Area of Conservation (SAC).

The HRA, submitted by NatureScot to Argyll & Bute Council on 23 May 2023, states:

*"This proposal is likely to have a significant effect on the Atlantic salmon qualifying interest of the Endrick Water SAC. This is due to a) the risk posed as a result of the potential impacts of sea lice on Atlantic salmon smolts emigrating through the Firth of Clyde; and b) as a result of genetic introgression should farmed Atlantic salmon escape in to the wild."*

In correspondence attached to the HRA, NatureScot stated the following:

*"On the basis of the information available to us at this time we conclude that the proposed site at North Kilbrannan is unlikely to contribute significantly to cumulative risk for post-smolts migrating from the Endrick Water SAC. We have reached this conclusion on the basis of sea lice dispersal modelling and evidence relating to smolt migration routes in the Firth of Clyde. In reaching this conclusion we have taken into account recent smolt tracking studies that indicate that the primary migration route for smolts from the Endrick Water SAC passes through the outer Firth of Clyde to the east of Arran. The available sea lice modelling suggests that this area is less likely to be subject to high density accumulations of sea lice. On the basis of the available evidence we consider that the risk posed to smolts passing through this area from the Endrick Water is low."*

The research referenced in the above correspondence is: Investigating the behaviour of Atlantic salmon (*Salmo salar* L.) post-smolts during their early marine migration through the Clyde Marine Region (November 2022; available here:

[Investigating the behaviour of Atlantic salmon \(\*Salmo salar\* L.\) post-smolts during their early marine migration through the Clyde Marine Region - PMC \(nih.gov\)](#)

The research states:

*"Because few smolts were detected on line F, it is assumed that they migrate along the east coast of Arran to reach the Irish Sea. Future studies are required to determine the duration spent in this region and potential risk of fish farm exposure. It is important to note that although this study provides important baseline information on the loss rates and potential drivers of post-smolt migration through the Clyde Marine Region, results are limited to only 1 year. Therefore, temporal repeatability of this project over multiple years is required to determine whether migratory patterns and survival rates reported are consistent across time."*

It has since come to our attention that there is further data available under this research project, which demonstrates that a) some salmon smolts from the Endrick Water SAC do migrate along the west coast of Arran and b) other fish have been detected on the west side of Arran, in the Kilbrannan Sound, most notably a small number from the Cumbrian Derwent Special Area of Conservation.

Considering the researchers themselves state that “future studies are required to determine the duration spent in this region and potential risk of fish farm exposure”, and with the knowledge that there is further data available to help determine this risk, we would urge Argyll & Bute Council to apply the precautionary principle and wait for the latest data to be analysed and published, so that the Habitats Regulations Appraisal can be updated if needed, before making a decision on this application.

We consider that, in the light of the above, an earlier decision that does not revisit the HRA could be unlawful.

Officer Comment: See point 2.0 above. New information has been received by NatureScot relating to this specific issue and it is being recommended that the Hearing be adjourned to allow NatureScot time to analyse this information and update their advice to the planning authority.

### **Cour Ltd**

This objection questions the validity of the proposed planning condition 16 which relates to the requirement for a communications and monitoring plan in relation to the use of fish bath medications. It is contended by the objector that chemical treatments at a large fish farm can last for twelve days and modelling and physical observation has proved that pollution will be drawn into Cour Bay and may be out of bounds to other users for almost a fortnight which is not only illegal but clearly unreasonable.

It is considered by Cour Ltd that it will be difficult if not impossible for MOWI reliably to alert marine users. Cour Ltd advise that they will not permit any commercial activity by MOWI on their property. Cour Ltd are of the view that the condition would be unenforceable and ineffective.

This letter of objection has also been addressed to SEPA and Cour Ltd has asked SEPA to confirm that they are aware that the Veterinary Medicine Directorate (VMD) only considered the very potent risk to the users and never considered the risk to swimmers when licencing these aquaculture chemicals. Similarly Cour Ltd contend that SEPA should know that the Health and Safety Executive do not hold any information concerning the safety of swimming in aquaculture chemicals. Cour Ltd appealed to the Chief Medical Officer to review the threat from fish farms to public health, but he failed to answer, so they submitted FOI requests and discovered that no branch of NHS Scotland has ever studied the safety aspect near a fish farm. They advise that NHS Highland have declined to provide assurance on the safety of swimmers as they are not qualified to do so and the Chief Medical Officer eventually delegated his response to Marine Scotland. They infer that it is the Council's responsibility supported by SEPA to assess the merits (and legality) of a planning application. Cour Ltd. advise that they have seen the Council's internal correspondence recognising that the planning application should not be consented until NHS Highland have endorsed the industry report on the safety of swimmers. Cour Ltd advise that NHS endorsement has never been given and they failed to assess Cour's counter evidence. Their last word was that they were very unsure about the subject and recommended “a systematic independent review of the health effects and the health impact of fish farms and their chemicals in general and an independent review of the local position”. Cour Ltd has also called on SEPA to revoke the CAR licence they have awarded to this site.

Officer Comment: NHS Highland were consulted on this application and have been provided with both the supporting information submitted by applicant and the third party reports in relation to this issue. NHS Highland have not objected to this planning application. If there was significant concern or uncertainty in relation to a public health issue relating to this



proposal then it would have been expected that NHS Highland would have objected or clearly expressed such matters in their response. However, in the absence of a definitive response on the supporting report or third party reports, officers consider that the addition of a condition requiring the applicant to publicise and monitor bath treatments will allow interested marine users to make an informed decision on whether to access waters in proximity to the fish farm. Officers consider that this would be a competent and enforceable condition. Officers have sufficient comfort from the supporting information and consultation responses to conclude that the proposal would not have a significantly adverse impact on human health which would provide a sustainable reason to refuse this planning application.

### **John Aitchison**

Wishes confirmation that the planning authority have sought and received the latest sea lice monitoring data (including field sampling of sea trout sampling) from the Argyll Fisheries Trust for the area about the existing fish farms at Carradale. The Trust has been sampling fish for the Carradale Farm EMP and for its own long term monitoring programme. It is contended that the planning authority should have access to this information before asking the planning committee to make a decision on any new farm which will add sea lice to the existing sea lice burden in the area.

Mr Aitchison also requests that we seek further clarification from NatureScot on FOSOJ's letter of 26<sup>th</sup> May 2023. There is concern that NS's argument rests on the presumed passage of these fish to the east of Arran, rather than through the Kilbrannan Sound. The evidence cited is a single tracking study, where several receivers in the Kilbrannan Sound produced no data, and with no comparable array of receivers to the east of Arran. Mr Aitchison wishes the Council to ask NatureScot to explain how this makes them sure beyond reasonable scientific doubt that the wild salmon population of the Endrick Water SAC will not be harmed by exposure to sea lice from this development, in addition to the sea lice from the many other farms in the Firth of Clyde.

Officer Comment: See point 2.0 above. New information has been received by NatureScot relating to this specific issue and it is being recommended that the Hearing be adjourned to allow NatureScot time to analyse this information and update their advice to the planning authority.

### **Lochranza & Catacol Community Association**

Object to the Council passing the responsibility buck onto SEPA in this matter, as it does in various places. SEPA offices are located in North Lanarkshire and nowhere near the Kilbrannan Sound.

Catacol Bay and Loch Ranza on North Arran which are opposite Cour Bay in the marine sense, will become cesspools from this salmon farm proposal.

The SEPA car licence procedure is faulty and yields an unsafe estimate of likely pollution impact.

Note the objection made by the Clyde Fisherman's Association.

Salmon farming by open net aquaculture is an environmental disaster area in progress, as the various objection made in this area really highlight. Argyll and Bute Council should be taking the lead for the West Coast of Scotland in protecting their local environment and by rejecting this MOWI travesty plan today.

Officer Comment: Comments relating to SEPA's regulatory responsibility are not a planning matter. This objection does not raise any new material issues which have not already been considered.

### **Support**

The Planning Authority has received a letter of support on 4<sup>th</sup> August 2023 from Tavish Scott CEO, Salmon Scotland, 3<sup>rd</sup> Floor, Venue Studios, 21 Calton Road, Edinburgh EH8 8DL.

This letter outlines the social and economic contribution that the proposal would make to the area.

Note: The full transcript of representations and consultation responses can be viewed on the Council's website [www.argyll-bute.gov.uk](http://www.argyll-bute.gov.uk)

### **Withdrawn Objection**

Mr Richard Salt has advised in an email dated 7<sup>th</sup> August 2023 that he wishes his objection to this proposal to be withdrawn.

## **7.0 FURTHER SUPPORTING INFORMATION FROM THE APPLICANT**

### **Email (dated 23/8/23) from Stephen MacIntyre, Head of Environment, MOWI Scotland Ltd. in relation to human health and bath medications**

MOWI have provided comment on the latest representation from Cour Ltd. on the risk to human health from the release of medicines that may be used at the North Kilbrannan fish farm.

MOWI advise that the wca\_environment report, submitted in support of the application by the fish farm company, details a human health hazard assessment of 3 medicines used in fish farming, using well established and internationally accepted risk assessment approaches. For each treatment substance exposure levels have been derived where no health effects are assessed to occur. These levels have been developed following a highly precautionary approach, including the following assumptions:

- That the water concentration is constant irrespective of environmental conditions e.g. temperature, wind, water flow etc.;
- That the water concentration is constant irrespective of treatment frequency;
- That the swimmer is swimming through a static plume, with no adjustment for distance from the fish farm or distance travelled while swimming;
- No allowance for residue degradation or dilution of the substances in the water;
- 100% absorption by dermal and oral routes of exposure.

The wca\_environment report concludes that the concentration of medicines azamethiphos and deltamethrin used in a pen bath treatment are lower than the no-effect levels and therefore there is no risk to wild swimmers, at any distance from the farm, from the release of medicine residues from a farm pen following completion of a treatment.

For hydrogen peroxide, the concentration used in the treatment pen is higher than the no effect level so the risk to open water swimmers depends on the dilution and dispersion of medicine residues in relation to the proximity of a wild swimmer, and the time for which the swimmer might be exposed to medicine residues. Dispersion modelling, taking into account

degradation of the compound and dispersion into the surrounding marine environment, demonstrates a rapid reduction in the concentration of hydrogen peroxide below the no effect levels in as little as 30 minutes and generally within a distance of 2-300 m from the treated pen centre point. Even with a worst-case scenario, a swimmer would have to be at the pen edge at the moment the treatment was released, and swim synchronously with the path of medicine dispersion (most likely parallel to the coastline) for a 2-hr period. This scenario seems highly unlikely to occur. If swimmers follow reasonable guidance and remain outside pen grid marker buoys, risk of exposure is reduced even further.

In summary, there is:

- no risk from azamethiphos and deltamethrin;
- minimal risk from hydrogen peroxide, only likely to occur if swimming at pen's edge immediately after and for an extended period thereafter.

To reiterate MOWI advise that, the above conclusions are based on a number of precautionary assumptions, including that water concentration is constant irrespective of treatment frequency. For added context, I would highlight that hydrogen peroxide treatments at the nearby Mowi sites at Carradale have not been frequent. It is not unreasonable to expect that fish health performance at North Kilbrannan might be similar to those at Carradale. Over the past 5 years (1825 days) there has only been 12 days on which hydrogen peroxide treatments have taken place at Carradale, which equates to 0.66% of the time.

Guidance for open water swimmers strongly advises that swimmers should always undertake a risk assessment of their proposed swim before entering the water; this should consider any potential risks related to water quality, weather conditions, temperature and risk of interactions with other marine users and activities. It is reasonable to expect that water users, including wild swimmers, stay a safe distance away from a salmon farm to avoid any risk of collision with workboats or entanglement in farm equipment (pens, ropes, moorings, nets). The same principle would equally apply to open water swimming in a working harbour or adjacent to sewage outfalls. Open water swimmers should therefore not be swimming within the planning/moorings boundary of a fish farm and to do so would be irresponsible. For locational context, the North Kilbrannan fish farm would be approximately 1300m distant from Cour bay.

In terms of the proposed planning condition, should consent be granted, Mowi will commit to implement the required communication plan including the required notification of treatments to local community groups and forums, marine leisure activity providers and landowners local to the site. Mowi highlight that they already operate a notification of treatments procedure as a requirement of ASC certification.

Finally in terms of the wca\_environment report, the statement from Cour Ltd. that the report is flawed is false and MOWI refer to the review carried out by the report authors on each of the commissioned reviews by Cour Ltd. The report does fulfil the fundamental requirements for the risk assessment of the three substances under their stated conditions of use and based on the criteria and assumptions as applied (and as clearly stated in the report).

**Email (dated 23/8/23) from Stephen MacIntyre, Head of Environment, MOWI Scotland Ltd. in relation to sea lice risk using the output of SEPA's preliminary screening model for the proposed Sea Lice Framework**

MOWI have advised that as they consider the outputs of these models to be highly precautionary they have sought clarification from SEPA on their current status and correct

future application. An email from Peter Pollard, Head of Ecology at SEPA is attached to this supporting information. This advises that

*“Under the current working arrangements between regulators regarding fish farm consenting, SEPA is not an advisor to local planning authorities on sea lice and wild salmonid interactions. Accordingly, we have not provided comments on sea lice to, or been asked to comment on sea lice by, Argyll and Bute Council with reference to its determination of the planning application for the proposed North Kilbrannan fish farm.*

*To support our current consultation on a proposed regulatory framework on sea lice, we developed draft sea lice screening models. One of these encompasses part of Kilbrannan Sound. We shared the files for this model with interested parties, including MOWI, on request as part of the consultation exercise.*

*All the screening models will be further developed before they are used within our regulatory framework. Once finalised, our intent is to use them during pre-application discussions to decide if further assessment of the risk to wild salmon is needed. Where further assessment is needed, the developer will be asked to provide suitable information, including modelling, with their permit application to help us carry out the assessment.*

*In respect of the planning application for North Kilbrannan, Argyll and Bute Council has not requested comment from us on the status of our screening models; their role once finalised or any reference to them by third parties. However, all aquaculture planning authorities, including Argyll and Bute Council, are aware of our proposed regulatory framework and the consultation document is available to them on our website. Consequently, we expect all authorities will have an understanding that the screening models have not yet been implemented; are subject to change through the consultation process; and will only be used to help decide if more detailed assessment is necessary.”*

## **8.0 RECOMMENDATION**

It is recommended that the Hearing is adjourned to allow time for NatureScot to update their advice to the planning authority in the light of the new information received.

**Author of Report:** Sandra Davies

**Date:** 28/8/2023

**Reviewing Officer:** Peter Bain

**Date:** 28/8/2023

**Fergus Murray**  
**Head of Development and Economic Growth**