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Ìrean Àrainneachdail na h-Alba

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[REDACTED]
By e-mail: [REDACTED]

8 May 2024

Case Reference IESS.23.044 – Aquaculture Impacts on Swimmers – Decision Letter

Dear [REDACTED],

Thank you for submitting your representation to Environmental Standards Scotland (ESS), regarding an alleged failure by the Scottish Environmental Protection Agency (SEPA) to assess the impacts of aquaculture on ‘other users of the water environment’ as required by Regulation 15(1)(c) of The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (‘the CAR Regulations’). Thank you for your patience as I have considered the case.

The representation

Your representation concerns your objection to a proposed salmon farm in North Kilbrannan (‘the Kilbrannan site’). SEPA granted the site a licence under the CAR Regulations in 2020.

Your objection relates to the chemicals used by the fish farm. You noted that the farm will use hydrogen peroxide, azamethiphos and deltamethrin to treat sea lice and these chemicals would be discharged into the sea. You believe that SEPA should be considering the effect of these discharges on swimmers and other recreational users of the sea before granting licences. You also raised the matter of other discharges such as effluent.

You acknowledged that ESS cannot intervene in individual regulatory decisions, but considered that this is an issue of wider relevance because all fish farms use and discharge the same chemicals into the sea.

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You had made a complaint to SEPA that they had failed to assess the impact of the farm on swimmers prior to granting the CAR licence for the Kilbrannan site. SEPA's position was that they did not identify swimmers were users of the area and therefore there was no 'trigger' for them to carry out an impact assessment in this regard. You disputed SEPA's position on this point as you said there were multiple representations made to them during the consultation period, many of which referred to the impact on swimmers.

With regard to the specific point as to whether, in the case of the Kilbrannan site, SEPA did not take into account representations from swimmers and therefore failed to consider the impact on them, as I explained in my email of 1 September 2023 this is an allegation of maladministration in relation to a specific regulatory decision and I provided you with details for the Scottish Public Services Ombudsman in this regard.

In considering your representation, I looked more widely at whether what you said presented any potential systemic issues regarding SEPA's compliance with environmental law, or concerns regarding the effectiveness of implementation of those laws.

Assessment of ESS' remit, and significance of the issue

When we receive a representation, our first steps are to confirm that it is within ESS' remit, and to consider whether the case raises issues that would be appropriate for investigation. ESS can investigate:

- Whether a public authority is failing (or has failed) to comply with environmental law
- The effectiveness of environmental law or of how it is (or has been) implemented or applied

I determined that the representation fell within ESS' remit in that it:

- Relates to a public authority - SEPA
- Relates to environmental law – the CAR Regulations
- Alleged a failure to comply with environmental law – that SEPA fail to assess the impact of chemicals used in fish farms on swimmers and other recreational users of the sea prior to issuing CAR licences
- Could relate to the way in which SEPA implement or apply environmental law
- Did not pertain to any legislative provisions excluded from ESS' remit

I also considered the representation to be mature (in other words, the matter had been raised with SEPA) and that it did not appear there were alternative remedies available in relation to the wider, systemic, matters.

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I went on to assess whether the representation met our significance criteria (if a case does not meet these criteria, we would normally not take it forward). The criteria considers whether the matter arises from a significant incident concerning the environment; raises public health concerns; is something that could seriously affect the welfare of a member of the public; concerns significant alleged neglect or systemic non-compliance; could undermine public confidence; or concerns a failure to meet international obligations.

I concluded that what you told us may raise concerns regarding the welfare of a member of the public or systemic non-compliance and that further enquiries were required in this regard. We therefore took the case forward to 'pre-investigation' stage. This stage involves ESS making enquiries with the public body to understand more fully the issues raised. Based on the outcome of these enquiries, the case may move to investigation or be closed.

Enquiries and responses

Following the decision to take the case to pre-investigation, I made a request for information to SEPA. I asked SEPA to:

- a) provide any policies or procedures covering how they identify 'other users of the water environment' and how the impact of the controlled activity on identified 'other users' is assessed
- b) provide information on how many occasions swimmers and/or other recreational users of the sea had been identified as 'users of the water environment' in relation to CAR licence applications for aquaculture

SEPA's response to question a) can be summarised as follows:

- Water use licences are used to provide authorisation for activities posing a higher risk to the water environment. Any point source discharges from fish farms must be licensed
- When determining an application under CAR, SEPA uses environmental standards to help assess whether the proposed activity could exceed the capacity of the water environment to accommodate it
- Environmental standards define the environmental conditions needed to support a particular ecological quality in surface water or maintain groundwater resources in good condition. Others are used to define the water quality necessary to safeguard water uses, such as drinking water supply, bathing, and shellfish production. This covers impacts on the vast majority of water users
- SEPA has a procedure for advertising and consulting on applications for CAR licenses, which allows for the public to make representations describing where, and for what activities, the water environment is being used, and why they believe those activities may be impacted. This ensures SEPA are aware of, and assess potential impacts on the interests of, the users of the water environment

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- Additionally, for fish farms, the pre-application process includes engagement with communities that may be affected
- In deciding whether to authorise an activity that would breach an environmental standard, cause deterioration of water body status, or prevent the future achievement of an objective of the River Basin Management Plan, SEPA carry out an assessment of the significance of any positive and negative impacts associated with the proposal, including impacts on social, economic, and environmental factors

SEPA's response to question b) can be summarised as follows:

- As a result of the December 2020 cyber-attack, they can only provide figures for applications received from January 2021 onwards
- 26 CAR Licence applications for aquaculture/fish farming were received and advertised between the period 2021 to the time of SEPA's response
- 11 representations were received which related to/identified swimmers or other recreational users of the sea as 'users of the water environment'
- SEPA and local authorities have received representations expressing concerns that discharges of bath medicines could impact the health of swimmers. Typically these representations make general statements about wild swimming rather than identifying specific locations with evidence of their use for swimming
- With regard to the proposed development in Kilbrannan Sound, when submitting an Environmental Impact Assessment Report to the planning authority (Argyll and Bute Council), following discussions between SEPA and the representatives of the sector, the developer included an assessment by independent consultants [REDACTED] for the potential for bath medicines to affect the health of swimmers
- The report concluded that only hydrogen peroxide would exceed its calculated safe levels, but dispersion and breakdown would reduce peak concentrations to safe levels within a few hundred metres of farms. This modelling result is consistent with what SEPA would expect if hydrogen peroxide was buoyant. In practice, making this assumption is likely to overestimate the distance from the farm before levels are safe. This is because, being heavier than water, hydrogen peroxide will tend to sink resulting in greater dispersion as well as lowering the depth of the centre of the plume
- Further documents were submitted to the Council including critiques of the [REDACTED] report and rebuttals of these critiques
- Where use of a specific area of the sea for swimming is identified following advertisement of a fish farm development application in future, where appropriate SEPA will use the information generated via the Kilbrannan planning application to inform its assessment of proposed bath medicine discharges

Following this, ESS made a further request for information from SEPA. We asked:

- Prior to the [REDACTED] report, how did SEPA assess the impact of bath medicines on human health?

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- How does SEPA assess the impact of other fish farm discharges (e.g. effluent, bath medicines not covered by the [REDACTED] report, any other pollutants) on human health?
- In cases where direct users of the water environment (eg individuals who state that they swim in the area) have **not** been identified through the advertising process, do SEPA routinely consider potential human health impacts of fish farm discharges?
- If so, can SEPA provide an example, with documentation, of how it has assessed the human health impacts of a fish farm application, and provide any specific guidance applicable in this connection?
- If not, given the public are entitled to swim anywhere in Scotland and fish farmers have no lease or ownership of the water and therefore cannot prevent them from doing so, please provide comment as to how SEPA are satisfied that human health is sufficiently considered and protected when considering applications for fish farm CAR licenses

SEPA's response can be summarised as follows:

- Prior to the [REDACTED] report, the risk of bath medicines on swimmers had not been assessed. However, the concentrations to which discharged bath medicines and other chemicals in coastal waters are limited to protect biodiversity (ie environmental standards) are typically orders of magnitude lower than concentrations that could affect human health. This approach has been discussed with Public Health Scotland.
- SEPA's assessment of other discharges are that they do not pose a risk to the health of swimmers. The factors considered in making this assessment were:
 - Other discharges do not form significant surface plumes so there is little or no risk of swimmers being exposed to concentrations above environmental standards. For example, concentrations above environmental standards can occur for organic solids from fish faeces and for the in-feed anti-sea lice medicine emamectin benzoate, however the mixing zone for these discharges is on the seabed immediately around the farm, not in the surface layer of the sea where any swimming would occur
 - The environmental standards to which discharges are regulated to meet are orders of magnitude lower than the concentrations in the environment that could affect human health
 - The risk of exposure to concentrations even close to environmental standards is minimal because farms are typically located well away from likely swimming areas
- In cases where direct users of the water environment have not been identified through the advertising process, SEPA do not routinely consider potential human health impacts of fish farm discharges, but for the reasons given above they do not consider chemicals discharged from marine fish farms are likely to pose a risk of

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health to swimmers. Accordingly, any further assessment of risk to human health from fish farm discharges is deemed unnecessary

- SEPA do not consider the term 'other users' to include all possible, speculative future uses and users of the water environment. However, irrespective of the general principle that the term 'other users' is taken to refer to those making current and ongoing uses of the water environment, SEPA do not consider that authorised discharges from marine finfish farms pose any significant risk to the health of swimmers and therefore further assessment of this is deemed unnecessary

Consideration

Before I set out my analysis of the information I have received, it is important to reiterate what the focus of my consideration has been. As I have explained above, SEPA's decision to grant a licence is an individual regulatory decision. ESS has no power to interfere with this decision. In terms of our statutory function, we take the information we receive through representations and consider whether there are any underlying systemic issues in terms of compliance with environmental law and how it is implemented and applied. Accordingly, while my analysis draws upon some of what SEPA has said and done in relation to this particular regulatory decision, my consideration has focussed on the regulatory system underlying the decision.

Your representation centres on Regulation 15(1)(c) of the CAR Regulations, which requires SEPA to 'assess the impact of the controlled activity on the interests of other users of the water environment'. This duty can be broken down into two steps: identifying other users of the water environment; and assessing the impact of the controlled activity on these users.

Identification of water users

The information provided by SEPA outlines a clear process for determining who may be considered 'users of the water environment' in relation to CAR licence applications. Their procedures require that applications in cases where the proposed controlled activity is likely to have a 'significant adverse impact on the water environment' are advertised. In practice, it appears that this requires the majority of, if not all, fish farm applications to be advertised, as outlined on the SEPA website. Advertisements invite third parties to comment on any risks they believe the development will have on the water environment or interests of users of the water environment. In addition, the pre-application process requires applicants to have engaged with local communities.

Whilst the community engagement and advertising processes do not guarantee that all users of the water environment will be aware of the application, in my view the processes which SEPA have in place demonstrate that it is, on a system level, compliant with the terms of Regulation 15(1)(c) in respect of identifying water users.

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You suggested that, given the public can legally swim anywhere in Scotland, swimmers should always be considered a potential user of the water environment, even if they do not respond to calls for comments on the CAR licence application. SEPA's view is that their duty does not extend to all possible, speculative future uses and users of the water environment. I accept their approach. I do not consider that it would be reasonable to expect SEPA to, in every CAR license determination, conceive of every possible and hypothetical use and user of the water environment in question.

Assessment of impact

Once users of the water environment have been identified, SEPA must assess the impact of the activities on those users. SEPA has several guidance documents in this connection, and particularly relevant is their guidance on assessing the significance of social, economic, and environmental impacts. This illustrates that the health impacts of controlled activities are considered by SEPA when determining CAR licence applications; and that any negative impacts are weighed against positive impacts. I think it important to highlight that the assessment being carried out here is not necessarily to ensure there are no negative impacts, but rather that there is a decision-making framework taking into account both positive and negative impacts. In many cases where SEPA are licensing activities there are potential negative effects – for example, when licencing sewage treatment facilities, it is accepted that in cases of heavy rainfall there may be sewage spills, which can negatively impact the environment and human health. Such spills are allowed in specific circumstances outlined in the licenses. Despite the potential for some negative impacts the facility is still licenced, and the focus is on limiting and managing any detriment.

Regarding the specific matter of the impact of aquaculture on swimmers/recreational users of the water environment, SEPA have confirmed that they will use the [REDACTED] report. I appreciate that you do not consider the report is sufficient to conclude it is safe to swim beside or near a fish farm and you disagree with the conclusions of the report. You provided several critiques, to which [REDACTED] have provided rebuttals.

You have highlighted that the report was commissioned by the salmon farming industry. I understand that [REDACTED] are an independent consultancy which provides advice on the risk assessment of chemicals in the environment and workplace. They have worked with both private and public bodies including the Office for Environmental Protection, and have research published regularly in scientific journals.

I asked a Senior Environmental Analyst at ESS to review the [REDACTED] report, the critiques you had provided, and [REDACTED] rebuttals of those critiques, to reassure me that it was reasonable for SEPA to rely upon the conclusions of the [REDACTED] report. Their view was that the methodology, modelling, and rebuttals to the critiques were reasonable, and they were satisfied with [REDACTED] conclusions.

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Given this, in my view it is reasonable that SEPA has made the decision to use the results of the [REDACTED] report to assess the impact of aquaculture on swimmers and other recreational users of the sea.

In relation to other discharges, SEPA has confirmed that the existing limits set by environmental standards (which are set to protect the water environment/biodiversity) are sufficient to protect human health and that the levels of the discharges that would impact on human health would need to be many times higher than the levels allowed by environmental standards. They also explained why they considered discharges which can result in environmental standards being breached, such as effluent, are not considered to pose a risk to human health. Having reviewed the information and explanation SEPA has provided in this regard, I am satisfied it has reasonably assessed the potential impacts of these discharges on other users of the water environment.

Conclusions

On the basis of the above, I am satisfied that in relation to the requirement for SEPA to 'assess the impact of the controlled activity on the interests of other users of the water environment' when considering an application for a CAR License, the systems in place appear sufficient to identify other users of the water environment and assess the impact of the activities on these water users. Accordingly, there is no evidence that the SEPA is failing to implement their duties appropriately, or are failing to comply with environmental law in this connection.

For these reasons, no further action will be taken by ESS in respect of your representation.

Finally, in relation to your more recent communication regarding the general process of licencing for aquaculture chemicals, these issues were considered outwith the scope of my consideration of your original representation. If you wish to make a further representation about these matters it is open to you to do so, specifically highlighting what environmental laws you consider are being breached, or ineffectively implemented.

I appreciate you may find this response disappointing, but I hope my explanation reassures you that we have fully considered whether there are any potential systemic issues raised by your representation. If there is anything in this letter you would like to discuss, please do not hesitate to contact me.

Yours sincerely,

[REDACTED]
Senior Investigations Officer