	Tell us about why you think the application will impact the water environment. - Q5 - open text box one	Tell us about why you think the application will impact the water environment. - Q5 - open text box two on impacted habitats and species	Tell us about why you think the application will impact the water environment. - Q5 - open text box three on specific chemical or substance concerns	Tell us about why you think the application will impact on people who use the water environment. - Q6 - open text box one	Tell us about why you think the application will impact on people who use the water environment. - Q6 open comment box two on impact on activities and their locations	Tell us about why you think the application will impact on people who use the water environment. - Q6 - open text box three on specific chemicals or substance concerns
1	[redacted] believe that the application to increase azamethiphos allowance at Ardgour salmon farm should be denied. The high toxicity of azamethiphos will detrimentally impact the water quality at the site and in surrounding areas. The modelling report suggests that the increase of azamethiphos to 0.573 kg per day will not be in breach of the Environmental Quality Standards. However, it is known that substances such as azamethiphos have both lethal and sub-lethal impacts on marine organisms, which will impact the overall biodiversity and ecosystem health in the area, and a risk assessment to further understand this has not been conducted.	Azamethiphos is a highly toxic compound to non-target organisms. It has been identified in the Modelling report submitted by the applicant (pg 28) that two areas of sensitivity exist in close proximity to the farm. These are flame shell beds and horse mussel beds, which are both Priority Marine Features (PMFs) in Scotland. Horse mussel beds are also listed as OSPAR habitats and as Annex I habitats within the EU Habitats Directive, included in specific legal obligations in Scotland via the Conservation (Natural Habitats, &c.) Regulations 1994. This legislation states that such habitats must be protected. The application does not acknowledge the existence of another PMF in very close proximity to the salmon farm. A seagrass bed approximately 800 m2 has been discovered within 200 m of the Ardgour farm. [redacted] is working with Project Seagrass, Seawilding, local dive clubs and a local Highland Councillor to assess the seagrass bed and monitor it. An increase to the azamethiphos allowance may negatively impact the seagrass bed by causing mortality and reducing survival of the various species associated with the habitat. Seagrass beds provide shelter and foraging opportunity for a multitude of species including fish, crustaceans and invertebrates. They are a UK Biodiversity Action Plan habitat, listed as an OSPAR habitat, protected under the EU Habitats Directive Annex I and are also listed on the Scottish Biodiversity List. Parsons et al. (2020) found that the potential footprint of azamethiphos impact could be up to 0.2 km2, putting the impacts on an increased use of the chemical well within the range of the newly discovered seagrass bed within 200 m of the farm. Several studies have indicated that the lethal dose for non-target organisms is well below the desired treatment concentration of 100 µg/L. Blue mussels (Mytilus edulis) were physiologically impacted by the chemical at doses relevant to standard aquaculture industry treatment after a few hours and included neurotoxic effects and immune system impairment (Canty et al., 2007). Exposures to Salmosan (azamethiphos) over 48 hours found lethal effects in three tested crustacean species over 850 m from the treated pens (Ernst et al., 2014), while lethal doses were found to be less than the recommended treatment dose for European lobster (Homarus gammarus) in modelling experiments at Norwegian fish farms (Parsons et al., 2020).	Salmosan or azamethiphos	As previously mentioned, the newly discovered seagrass bed is being monitored by [redacted] in collaboration with other organisations. The increased use of azamethiphos may have a deleterious impact on the biodiversity associated with the seagrass, and will render all the effort so far put in place to monitor and survey the area pointless. [redacted] are working with NatureScot to secure funding to monitor this site, and this could be massively impacted by the proposed plan. The community could potentially lose a valuable marine resource on their doorstep.	Community-led marine habitat monitoring using divers and snorkellers, plus community engagement in monitoring and potential expansion/restoration of the habitat.	Salmosan/azamethiphos

Tell us about why you think the application will impact the water environment. - Q5 - open text box one	Tell us about why you think the application will impact the water environment. - Q5 - open text box two on impacted habitats and species	Tell us about why you think the application will impact the water environment. - Q5 - open text box three on specific chemical or substance concerns	Tell us about why you think the application will impact on people who use the water environment. - Q6 - open text box one	Tell us about why you think the application will impact on people who use the water environment. - Q6 open comment box two on impact on activities and their locations	Tell us about why you think the application will impact on people who use the water environment. - Q6 - open text box three on specific chemicals or substance concerns
	In addition to impacts on crustaceans and other non-target species, there is evidence to suggest that azamethiphos can degrade marine microbial communities (Garcés et al., 2020), leading to large-scale and long-term consequences for overall ecological health. References cited: Ernst, W., Doe, K., Cook, A., Burridge, L., Lalonde, B., Jackman, P., Aubé, J.G. and Page, F., 2014. Dispersion and toxicity to non-target crustaceans of azamethiphos and deltamethrin after sea lice treatments on farmed salmon, Salmo salar. Aquaculture, 424, pp.104-112. Garcés, D.V., Fuentes, M.E. and Quiñones, R.A., 2020. Effect of Azamethiphos on enzymatic activity and metabolic fingerprints of marine microbial communities from the water column. Aquaculture, 529, p.735650. Canty, M.N., Hagger, J.A., Moore, R.T.B., Cooper, L. and Galloway, T.S., 2007. Sublethal impact of short term exposure to the organophosphate pesticide azamethiphos in the marine mollusc Mytilus edulis. Marine Pollution Bulletin, 54(4), pp.396-402. Parsons, AE, RH Escobar-Lux, P Næverlid Sævik, OB Samuelsen, A-L Agnalt. 2020. The impact of anti-sea lice pesticides, azamethiphos and deltamethrin, on European lobster (Homarus gammarus) larvae in the Norwegian marine environment. Environmental Pollution, 264: 114725				