

	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 the water environment. - Q5 - file upload	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	<p>I wish to register my objection to the granting of a modification to the CAR licence for both North and South Carradale fish farms to accommodate increased quantities of azamethiphos, a wide spectrum organophosphate toxicant. The applicant has stated that it has been prepared to manage production units elsewhere in Scotland without the deployment of chemicals so there is no reason why it cannot apply this capability to its Carradale facilities similarly. My understanding is that cleaner fish are already used in a sacrificial condition to manage sea lice infestation.</p> <p>Kilbrannan Sound has recently been designated by SEPA as a high risk stretch of water for migrating salmon smolts and returning wild salmon and this designation is pointing to the need for better management measures to contain those sites of sea lice “factories” throughout the Clyde seas. There is clearly a need to include an evaluation of the existing load of toxic chemicals already present including azamethiphos and examine alternative constraints such as vastly reduced stocked biomass at the Kilbrannan Sound fish farms.</p> <p>It is noted that the last publically recorded use of azamethiphos at the Carradale fish farms by the applicant was March 2023. The opportunity could have been taken at the time to monitor dispersion and to record the effectiveness in use. No such information has been presented in support of this application. In fact the monitoring programme presented does not even contain any mention of means for ensuring in practice the safe use of such a toxic chemical from an environmental standpoint, it having been prepared for an earlier regulatory driver.</p> <p>Toxic chemicals should not be used as a means of providing life support for a vast concentration of biomass in such a constrained and environmentally crucial waterway where climate change is inexorably leading to higher marine temperatures. Carradale and North Kilbrannan already present one of the largest concentrations of captive biomass in Scottish waters with its attendant risks. Simply using twice as much organophosphate chemical is not the answer to risk management in this case of salmon aquaculture.</p>		Azimethiphos	Not Answered	There remains considerable uncertainty about human health issues related to swimmers contact with organophosphate contamination particularly in this locality with its concentration of fish farms. My understanding is that the recent study of toxicity to humans leaves open a number of challenging questions that remain to be resolved.		

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2	<p>We object to the application by MOWI to double the amount of Azamethiphos that can be used at Carradale Marine Pen Fish Farm. This is a toxic organophosphate pesticide that SEPA should be seeking to reduce and remove its discharge into the marine environment not to permit increased quantities to be used and discharged into the sea.</p> <p>An application to increase the amount of Azamethiphos used clearly indicates there is a significant problem with sea lice that treatments with lesser amounts of this chemical are not addressing. It is unacceptable that the proposed response to address this is to put greater amounts of toxic chemical into the sea.</p> <p>Environmental monitoring requirements associated with CAR licence requirements are not sufficiently robust to monitor the toxic harm from this sort of chemical in the marine environment. There is sufficient evidence about the toxic effects of such chemicals to warrant a much more precautionary approach, not a doubling of the quantity that can be used.</p> <p>We see no evidence that the requirements of Section 15 (b)(i-iii) and 15 (c) of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 have been addressed in relation to this application. Section 15 makes it clear that determination of a CAR licence must take into account both direct and indirect impacts on the environment and must consider social and economic impacts and benefits and also assess the impacts on other users of the water environment.</p>	All species within the marine ecosystem including larval and juvenile stages.	Azamethiphos – a toxic organophosphate chemical	Not Answered	<p>Organophosphorous compounds are known to be toxic to human health with numerous reports linking these chemicals to various forms of neurodegenerative, psychological and neurobehavioural effects, with mounting evidence that sub-acute levels of chemicals have a harmful effects at molecular and cellular levels.</p> <p>With increasing use of marine waters for recreational activity there is increased likelihood of individuals coming into contact with these chemicals when they are used as treatments in open cage fish farms.</p> <p>We see no evidence that the requirements of Section 15 (b)(i-iii) and 15 (c) of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 have been addressed in relation to this application. Section 15 makes it clear that determination of a CAR licence must, along with other considerations take into account both direct and indirect impacts on the environment and must assess the impacts on other users of the water environment. This has not been addressed in relation to this application.</p>	Any activities on the shore or in and on the water	Azamethiphos – a toxic organophosphate chemical
	<p>Submissions have been made by email, if you wish to view these responses please email registry@sepa.org.uk and request a copy. Please refer to reference CAR/L/1078064 – Carradale South MPFF when emailing.</p>						