Australian Government
Australian Pesticides and Veterinary Medicines Authority

Pre-application assistance (PAA) – APVMA written assistance

Applicant name:	FISHERIES RESEARCH AND DEVELOPMENT CORPORATION
PAA ID:	136869
Assistance tier:	2
Product permit name:	136869 - Sed8 Aquatic Anaesthetic and AQUI-S Aquatic Anaesthetic / Freshwater and marine crustaceans / Sedation
Date advice provided	18/10/2022

Summary of proposed application

Obtain advice on data requirement to contribute to a minor use permit application to sedate freshwater and marine crustaceans using registered isoeugenol products.

APVMA advice

The APVMA has reviewed your pre-application assistance application and provides the following advice under each of the relevant risk areas. Please note, advice has only been provided for technical areas requested by you in the PAA application form. Further data may be required to support a minor use permit application.

Human health (toxicology and worker health and safety)

You wish to apply for a minor use permit for two registered products, both containing 540 g/L isoeugenol. The intended use is to treat crustaceans at a dose rate of 5-20 mg/L (5-20 g/1000L water) of either product by immersion. The currently approved maximum application rate is 17-25 mL/1000L water of which the highest dose equals to 1.35 mg/L of isoeugenol in a solution. The intended use pattern is similar to the approved use pattern. While the proposed application rate is higher (5-20 mg/L of isoeugenol) than that of the currently approved, treating crustaceans is unlikely to pose higher exposure risk to workers than treating fish, provided the workers adhere to the first aid instructions and safety directions including the PPE requirements directed on the product labels. No further Health assessment would be required.

Residues and trade

Currently, there is no isoeugenol MRL associated to cover the use on Crustaceans in the Table 1 standard. The current MRL established on fish species are not considered appropriate to be extrapolated to crustaceans as fish species are not considered a representative species for crustaceans.

Therefore, residues data on crustaceans addressing the proposed treatment regime will be required to establish an appropriate MRL. For more information on conducting residue studies, you are encouraged to visit the VICH guideline (https://www.fda.gov/media/114760/download).

Crustaceans are considered to be a major export commodity (https://apvma.gov.au/node/669). The potential risk to international trade from crustaceans will need to be considered and a Trade consultation (a Trade Advice Notice) with industry stakeholders may be required to help determine if any potential risk to international trade can be managed. MRLs for isoeugenol have not been established by major export markets for crustaceans. If the dataset allows, consideration of an Export Slaughter Interval (ESI) could be considered to assist in the management of trade risk.

A residues module 5.3 module would be required for a permit application as consideration of residue safety and trade risk would be required.

Environment

The proposed minor use involves sedation of freshwater/marine crustaceans using a registered product at a higher dose than indicated on the label.

Based on the VICH Phase I guideline[1] further assessment would not be required for a minor species if an equivalent use has been approved for a major species under similar conditions, the same route of exposure and at the same dose. As the proposed use involves a higher dose per individual this is not a suitable line of argument to support the proposed use.

The criteria at VICH Phase I indicate that it is the environmental introduction concentration ($EIC_{aquatic}$) that is the critical issue for the environmental assessment. If it can be demonstrated that the $EIC_{aquatic}$ will be <1 µg/L, accounting for mitigation options if needed, then assessment can stop at Phase I, in which case a module 7.3 is appropriate. Otherwise, VICH Phase II assessment would be required under module 7.2.

Information relating the comparative total release volumes, for salmonid and crustacean aquaculture systems, can be provided as supporting information. However, the critical issue for the risk assessment is the environmental introduction concentration and it should be demonstrated that the relevant criteria are met. Sufficient information should be provided to demonstrate what the environmental introduction concentration will be under the proposed conditions of use. If any mitigation is required (e.g., dilution or degradation prior to release) this will also need to be supported by information to demonstrate how it will be achieved in practice.

Efficacy and target animal safety

Efficacy

The proposed minor use involves sedation of freshwater/marine crustaceans using a product currently registered for sedation or anaesthesia in salmonids in Australia.
Generally, the following should be provided:

- Evidence to support the recommended dose rate, duration of treatment and route of administration.
- Evidence to support the efficacy of the product for all proposed uses in all target species.

You may submit a valid scientific argument or information on overseas registrations (if available) to satisfy us of the efficacy criteria. In this PAA request you have cited publications on studies conducted with AQUI-S, the subject of the proposed minor use permit, in some of the targeted species. A scientific argument supported by these published references may be provided to address the efficacy criteria. Please note, these references have not been assessd as part of this PAA. However, a quick glance at the references shows that:

- The studies only involved some of the targeted species (lobsters *Jasus edwardsii* and prawns (*Macrobrachiurn rosenbergi*). The scientific argument will have to include a valid scientific justification why the results from these studies can be extrapolated to the rest of the species classified as “Freshwater and marine crustaceans”.

- The studies were conducted overseas. The scientific argument will have to address any species and environmental differences from those in Australia and why the APVMA should be satisfied that the results achieved in the overseas studies will be achievable under the Australian use situation.

[1] CVMP/VICH (Committee for Medicinal Products for Veterinary Use/ International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products), 2000. Guideline on environmental impact assessment (EIAs) for veterinary medicinal products (VMPs) – Phase I, VICH GL 6 (CVMP/VICH/592/1998) Available at: http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2009/10/WC500004394.pdf

Target animal safety

Evidence to demonstrate the safety of the product in the target species following administration by the proposed route will be required. Similar to efficacy, a scientific argument supported by the cited published references may be provided to address target animal safety criteria.

A module 8.3 assessment will be required.

International assessments

The APVMA will consider relevant international assessments, provided the data supporting the assessment are also provided. Guidance for the submission of international data can be found on the APVMA website at apvma.gov.au/node/14186.

Resulting application

The likely item number for this application is Item **21**.

As stated above, the advice provided is for the technical areas requested by you in the PAA application form. There may be further data requirements to support a minor use permit application, resulting in additional modular assessments where advice was not requested. The modules, timeframes and fees applicable (based on the current fee structure) for the modules identified above are found on our website: https://apvma.gov.au/node/1088.

Please note: Applications may still be subject to recategorisation under section 70B of the Agricultural and Veterinary Chemicals Code. If recategorisation is required, you will be given the reasons why the modules are to be changed and the opportunity to respond.

If additional information is requested under section 159 of the Agricultural and Veterinary Chemicals Code during the assessment of the application, an extended timeframe as outlined in Schedule 6 of the Agricultural and Veterinary Chemicals Code Regulations will apply.

The assistance provided by the APVMA is based on the information provided in your pre-application assistance request. If the information you have provided is not complete or correct, that could limit the effectiveness of the assistance provided by the APVMA.

The APVMA gives no undertaking that any application lodged after receiving pre-application assistance will be approved.

Outcome

If you require clarification of any issues addressed in this request for pre-application assistance, please contact your case manager. If you are seeking advice on additional/new questions, you will need to apply for further pre-application assistance under a new application. More information is available at apvma.gov.au/node/108.

When submitting this record in support of an application please ensure you include it in your information list.

Feedback

The APVMA welcomes your feedback on our PAA service and the assistance provided to you throughout this process.

If you would like to provide feedback, please complete the *pre-application assistance feedback form*, available at apvma.gov.au/node/97841 and return it via email to casemanagement@apvma.gov.au.