



**31 January 2022**

Dear Decision Making Committee (APP203974)

**RE: FURTHER INFORMATION FROM ZESPRI ON APP203974**

As noted in Direction and Minute WGT002 for this Application, the Decision Making Committee (DMC) declined requests for an extension for submissions from New Zealand Kiwifruit Growers Incorporated (NZKGI) and Māori Kiwifruit Growers Incorporated beyond 20 December 2021. Rather, the DMC asked parties to the reassessment wanting to provide further relevant information to submit (a) the nature of this information and (b) the timeframe in which it can be provided by 31 January 2022.

Zespri writes:

1. in accordance with this Direction; and
2. for the purpose of requesting an extension under section 59(5) of the HSNO Act to extend the timeframe for a hearing prescribed by section 59(1)(d) of the Act to allow us to provide further information that will be critical to the EPA's risk assessment of hydrogen cyanamide.

**Further relevant information**

As indicated in its submission, Zespri's position on the Application is that:

- the risks of hydrogen cyanamide's use have been overstated and the benefits (and conversely the negative impact of its removal) are significantly understated; and
- the EPA does not presently have sufficient information that is both relevant and appropriate to the scale and significance of the risks, costs and benefits associated with hydrogen cyanamide to conduct a sound risk assessment.

Accordingly, Zespri has three distinct pieces of information that it intends to provide to assist and inform the decision-making process. These are as follows.

**Item 1: Worker Exposure Monitoring Study**

As noted in our submissions, Zespri considers the EPA's assessment of the adverse risks of hydrogen cyanamide to be overstated and based on modelling and assumptions that are misplaced and rely on US EPA data which:

- is not sufficiently representative of how the product is used on kiwifruit in the New Zealand context; and
- does not take into account the controls that the New Zealand industry impose on the substance.

Accordingly, Zespri is commissioning an exposure monitoring study in the New Zealand context to quantify the efficacy of current, existing applicator control measures in reducing hydrogen cyanamide exposure. In our letter dated 14 October 2021, we asked the EPA to clarify the worker exposure scenarios used in Appendix B of the EPA's application to model the risk to operators. The EPA advised in a response sent in a letter dated 22 October 2021 that:

*It is sometimes difficult to reconcile the modelling with the actual reality of how things happen in the field. This is why the "ultimate" higher tier for operator/worker exposure is actual field experiments.*

The reference values used by the EPA in the application report are derived from studies in the USA involving application to citrus, pecans, stone fruit, grapes and pome fruit - all significantly different to kiwifruit. Factors such as the level of foliage present and the equipment used are likely to impact not only on the behaviour of spray particles but also worker exposure. The studies used are not representative of the kiwifruit industry as the plants are grown in different configurations - ie kiwifruit are grown on pergolas - hydrogen cyanamide is sprayed in dormancy when no leaves are present, and different equipment is used compared with these studies.

Zespri is working on the precise methodology for this study and is keen to work with the EPA and WorkSafe on trial design to ensure the data we collect is robust and can inform the EPA's risk modelling, as well as help us accurately determine the best controls to keep our people safe.

For the testing to accurately measure exposure, it can only be done at the time of year when hydrogen cyanamide is used (and when the vines have no leaves) so the relevant conditions are assessed. Accordingly, we intend to conduct this monitoring study at the earliest opportunity, which is in winter 2022, monitoring any potential exposure during actual commercial applications of hydrogen cyanamide to kiwifruit orchards.

There are two aspects to our high-level approach for the monitoring study. The first will directly determine any hydrogen cyanamide exposure of spray operators using monitoring patches on spray contractor's bodies, under protective clothing and equipment, following current PPE requirements. These patches will be worn during application and any cyanamide exposure would be quantified after the contractors' shift.

The second approach will be to sample spray contractor's urine for the hydrogen cyanamide metabolite N- acetylcyanamide. These studies will be conducted during the application window for hydrogen cyanamide to kiwifruit - ie July to September.

The first opportunity to conduct this monitoring is during winter 2022 during the application period. We aim to provide a report summarising the results in **spring 2022**. We note that recent HSNO committee member Dr Nick Roskrige has advised his support for this approach we are proposing to ensure the worker exposure risk assessment is accurate.

## **Item 2: Bird survey**

Zespri disagrees with the assertion that there is significant risk to birds from hydrogen cyanamide use and our growers consistently inform us that there are few birds in and around orchards in winter when hydrogen cyanamide is applied. Zespri intends to conduct a bird survey on orchards in winter 2022, to help determine whether or not additional risk mitigation measures may be required to reduce the risk to birds, such as use of scarers immediately after hydrogen cyanamide application.

Zespri commissioned a review from Wildlands Consultancy, *Preliminary review of the effects of hydrogen cyanamide on birds in kiwifruit orchards in Aotearoa New Zealand* and submitted this to the EPA in December 2021. A key conclusion from this report is that sampling of bird populations in the season of application is required to better understand any risk from use of hydrogen cyanamide to birds.

As this survey will take place in winter 2022, it will also be available in **spring 2022**.

## **Item 3: Toxicologist report**

Zespri has commissioned BartCrofts Scientific Services to provide an expert toxicology review of the EPA's risk assessment. Zespri has already submitted a preliminary scoping review from these toxicologists which already identifies areas of disagreement with the EPA's worker risk assessment.

As the EPA has stated in a variety of forums, such as the 2021 Agcarm annual conference, there is a shortage of toxicologists with the necessary expertise to understand and assess the risk to people from using agrichemicals. The EPA has acknowledged that this is a constraint on its own ability to progress work in as timely a manner as it would hope. Submitters seeking the services of toxicologists to review the EPA's application report face the same difficulties.

The toxicologists we commissioned have said that the preliminary report was all they could produce by the submission deadline of 20 December 2021. They have advised that a full report can be completed and submitted to the EPA in **April 2022**.

## **Request for extension**

To date, Zespri has made, and will continue to make, every effort to provide the information in as timely a manner as possible following the release of the EPA's application. Zespri's ongoing wish is to engage constructively with the EPA on this important reassessment.

As noted in our submissions, without these three critical pieces of research, the EPA does not currently have the information required to conduct a robust assessment of:

- the level of risk posed to human health and the environment by the use of hydrogen cyanamide in kiwifruit in New Zealand;
- whether the benefits of hydrogen cyanamide outweigh the risks (after controls are applied); and/or

- whether the residual risks are acceptable given the uses of hydrogen cyanamide.

The EPA will want to ensure the information it considers is both relevant and appropriate to the scale and significance of the risks, costs and benefits associated with hydrogen cyanamide. The information we intend to provide is required to ensure that any decision in this reassessment is made based on accurate, relevant evidence. In addition to providing essential information required for the EPA's risk assessment, these studies and research will also be critical in determining what controls should be recommended to mitigate risks to operators, such as the need for improved PPE, closed-cab sprayers and/or closed mixing/loading systems.

Accordingly, while we understand that a hearing date has not yet been set down, Zespri requests the DMC use section 59 (5) of the HSNO Act to extend the timeframe by which the hearing date must be fixed (prescribed by section 59 (1) (d) of the Act) to allow us time to provide this relevant information.

### ***No urgency***

Zespri acknowledges that an extension will delay the hearing. However, it is not clear what the basis is for urgency. In particular, we note that:

- The report from the EU providing the “new information” on which this application report is based is from 2010 (12 years old).
- Mr John Levers made his application to the EPA in February 2019, two-and-a-half years ago.
- The EPA took 18 months to take action as a result of that decision , issuing the application to reassess on 20 September 2021.

Accordingly, it is not reasonable to require interested parties to provide a complete response to the Application within a period of four months. This is particularly so, when the adverse impact to Zespri, our growers and their communities, should hydrogen cyanamide be removed as proposed by the EPA is \$2.8 billion over 10 years.<sup>1</sup>

### ***No prejudice to submitters by extending hearing***

Zespri acknowledges that an extension will delay the hearing. However, the applicant (EPA) and submitters will not be unduly prejudiced by extending this timeframe, even if they do not consent to the waiving of the timeframe.<sup>2</sup>

Relevantly, the EPA's reassessment decision is unlikely to be concluded by the 2022 hydrogen cyanamide application season in any event (based on the timeframes from recent other large reassessments). Therefore, there is no prejudicial impact in awaiting the results of further testing and research before the EPA proceeds to evaluation and public hearing.

Conversely, all submitters will be prejudiced if the hearing does proceed without this further information:

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<sup>1</sup> As discussed at Section 4 of our submissions, based on the EPA's own *Risk Assessment Methodology*, the magnitude of the effect is massive.

<sup>2</sup> Section 59 (4) (b) of the HSNO Act.

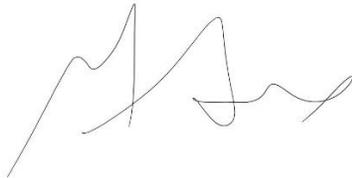
- Growers and other interested parties will not have an opportunity to be heard as the four-month response period falls outside the period in which hydrogen cyanamide is used and as a result does not allow parties to conduct their own research necessary in order to respond to the EPA's application report.
- There will not be sufficiently robust evidence available on which the EPA can make a sound risk assessment. As a result:
  - the EPA may be forced to decline the Application for want of scientifically-robust evidence; or
  - the outcome of any risk assessment conducted by the EPA prematurely, may be changed by the findings of these studies and potentially prompt another reassessment.

While the HSNO Act does provide statutory timeframes, there are mechanisms for extending these. It cannot be the intention of the Act that these timeframes be adhered to at the expense of natural justice and due process.

Therefore, we consider it would be prudent and appropriate to extend the timeframe for relevant information to be provided and adjourn the EPA's evaluation and public hearing until all evidence is available.

We look forward to hearing from you.

Kind regards and thank you for your consideration,

A handwritten signature in black ink, appearing to read 'M. Fox', with a stylized, cursive script.

Michael Fox  
Director of External Relations  
Zespri International