



October 14, 2021

Dear Chris

We have some questions for you about the EPA's hydrogen cyanamide reassessment application. The outcome of the reassessment could have a significant impact on the industry and our stakeholders so we want to make sure we fully understand what the EPA is proposing and why.

Could you please provide us with answers to the following?

1. What is the definition of *non-target* and *threatened plants* and *water body*? This is in relation to the proposed buffer zones and modelling/risk assessments.
2. What real-world/incident information do the EPA hold on the risk to non-target plants? We are aware some fruit-bearing trees have been adversely affected from off-target exposure but are not aware of there being phytotoxicity issues in general. Yes, the modelling says risks are above LOC, but what reports do the EPA have of there being risks other than to fruit-bearing trees? How about grass?
3. What assumptions does the runoff risk assessment make, and the modelling account for, for interception by grass and other vegetation before runoff would enter waterways?
4. In terms of the data in table 5 of the application report, what is meant by the phrase *in areas where hydrogen cyanamide is used*?
5. How is the EPA defining *airblast* spraying?
6. Have AI nozzles and drift reducing adjuvants been accounted for in the drift modelling? If so, how?
7. Has shelter been accounted for in the modelling? If so, how? What consideration was given/is being given to shelter as a control?
8. The human health risk assessment separates out mixing and loading from application itself when considering the engineering control refinements - use of a closed cab and enclosed mixing system. Could the EPA please do this for the risk assessment in table 29 of the science memo - i.e. the risk modelling involving certain levels of PPE?
9. The science memo indicates that closed cab application results in low risks that are still above the acceptable level of exposure. Could you please clarify how this exposure is expected to occur? I.e., is it exposure through the cab filters? Through leaking seals? Walking spills of concentrate or dried product into the cab and being exposed to that? Is it dermal, oral, inhalation or a combination of the three?

10. The EPA risk methodology says that when modelling risks to birds, either an RQ or TER will be calculated, and that if a TER approach is used this will be converted into RQs to enable comparison with other modelling. This does not appear to be included in the science memo or other appendices. Could the EPA please report the RQs for this risk assessment?
11. There are inconsistencies between how risks/benefits are described in the specific modelling/risk assessment reports, and how they are described in the summary report. Are the proposed controls and the proposal to phase out hydrogen cyanamide based on how risks are described in the summary report or the content of the individual assessments?

We need these answers before we can start work on much of our submission so we would appreciate a response at your earliest convenience. Could you please let us know when you'll be able to provide the answers so we can share the timeframes with the external experts who are contributing to our submission?

Please feel free to send the answers through as they come in instead of waiting to send them all at once. And don't hesitate to get in touch if you have any comments on the questions above.

Best regards,

A handwritten signature in black ink, appearing to read 'Michael Fox', with a stylized flourish at the end.

Michael Fox
Director of External Relations
Zespri International