

STIMBR SUBMISSION: APP202804

Response to the Direction issued 12 Feb 2019

STIMBR responds to the Direction with regard APP202804 issued by Dr John Taylor, Chair, Decision Making Committee on 28 January 2019 in order to assist the Committee understand the nature and scope of field work STIMBR has underway that will address the issues identified and comments as follows:

STIMBR understands the Decision Making Committee's (DMC) desire for additional information as it considers the application (APP 202804) from Draslovka seeking to permit the import and manufacture of EDN in New Zealand. We note that the DMC has not given an indication as to how much longer the process is likely to take and we must express concern that the process does not continue to drag on endlessly.

The challenges of working with a new fumigant

We acknowledge that EDN is a new fumigant and as such is not something the EPA has previously had to consider. We also acknowledge that the changes arising from the Health and Safety at Work Act 2015 have also resulted in the EPA and Worksafe needing to work together to address aspects of the application that they are responsible for.

Meeting the need

STIMBR notes that the application seeking approval for use in New Zealand was lodged by Draslovka in July 2017 and shares with the industry the resulting frustrations that have arisen from the delays in the DMC reaching a decision.

STIMBR and the industry have done and will continue to do everything in their power to address the challenges arising from the controls determined by the EPA in the 2010 Methyl bromide reassessment decision and the rapidly approaching deadline of October 2020 when the controls regarding methyl bromide use come into effect. We are committed to assisting the EPA and Worksafe where ever we can. We note that further delays are likely to have a significant effect on the industry's ability to trade if we do not have EDN in place by October 2020.

STIMBR has made very significant advances in our globally collected knowledge since commencing an ambitious research programme in 2011. EDN was identified and has now been confirmed as an efficacious alternative to methyl bromide as a phytosanitary treatment for forest products. The recent surge in research interest around the globe in EDN reflects the desire and awareness of potential users to find environmentally sustainable alternatives to methyl bromide.

EDN emissions data and worker exposure studies

STIMBR is collecting emissions and worker exposure data while undertaking the commercial scale confirmatory tests it is currently conducting. The confirmatory tests are due for completion in April 2019. In order to assist the DMC and Worksafe with data STIMBR is working closely with Draslovka, Genera and Plant and Food Research [principally concerned with the efficacy testing i.e. the environment under the tarpaulin during fumigation]. The tests are using commercial scale stacks treated with EDN at 120gm/m³ over 24 hours. The primary purpose of these trials is to confirm that the treatment rate identified in laboratory testing is efficacious against the target insects.

Efficacy – commercial scale

We are able to confirm that the first two commercial scale efficacy tests to confirm the treatment rates have been completed and proven successful with over 64,000 insects used in the trials consequently extracted from logs and counted. All insects in the treated stacks have been dead. Insects are currently being extracted from the logs treated in the third test [those in the treated logs extracted so far are dead]. The results will be confirmed in the week ending 15 March 2019.

We can advise that we will be requesting MPI to advocate for a maximum commercial treatment rate of 120g/m³. This is less than the rate of 150g/m³ advised in the application.

Absorption

As predicted in the laboratory tests field tests have confirmed EDN is rapidly absorbed into the logs after it is released into the space to be treated. The level of EDN in the head space falls to less than 1% of that applied after approximately 15 hours. The data from the three commercial scale tests is yet to be analysed and will be reported once analysis is completed. This reinforces STIMBR's contention that recapture technologies are not scientifically justified.

Worker exposure studies

In order to provide robust data STIMBR and Draslovka have engaged an occupational health hygienist (Derek Miller) to identify data needs, collect data and prepare a report covering worker exposure risk. He is working in the field during the fumigation and venting processes. He will be available to meet with the DMC and Worksafe if needed.

AERMOD modelling

The direction invites comment on the response received from Dr Bruce Graham in which he answers questions raised by the DMC.

We note the advice and explanations provided by Dr Graham in particular his opinion "*that AERMOD is a suitable choice for the assessment*".

Observations to date made in the field [report will be made available] during confirmatory testing confirm that the AERMOD modelling prepared by Sullivan Environmental [previously supplied by Draslovka] is conservative.

STIMBR has requested that the Decision makes provision for all forms of fumigant containment i.e. shipping containers, stacks and ship holds. AERMOD modelling that considers both stacks and ship holds is available should the DMC wish to consider it.

Concluding comment

STIMBR is working with Draslovka to garner as much information from the commercial scale confirmatory tests as is possible to assist the DMC.

STIMBR encourages the DMC and Worksafe to provide decisions as soon as it has the information Draslovka and STIMBR will provide in response to the request from the DMC so the Industry can have EDN in place as replacement for methyl bromide by October 2020.

Ian R Gear
Executive Officer / Research Director
STIMBR

8 March 2019