

APP202804 - EDN (Ethanedinitrile)

Submission Reference no: 40

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Submitter Type: Community Group

Source: Web Form

Clause

What is your position on the application

Position

I support the application

Notes

I support the application for registration of ethanedinitrile as a fumigant for forest product exports.

Clause

All submissions are taken into account by the decision makers. In addition, please indicate whether or not you also wish to speak at a hearing if one is held.

Notes

I may be requested at a later date to speak at the hearing.

12 APRIL 2018

Submitter Details:

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My submission is in support for the registration of ethanedinitrile (EDN) as a phytosanitary (quarantine) fumigant for the fumigation of logs before export from New Zealand.

I was a research entomologist with the US Department of Agriculture's Agricultural Research Service (ARS) for almost 40 years. During that time, I worked on the development of stored product treatments, including fumigants, to prevent losses to insects during storage. Much of my career was specific to the research and development of phytosanitary treatments, including fumigants, to export commodities through quarantine barriers both within the US and to overseas markets.

After my retirement from ARS in 2007 I emigrated and started my company, Quarantine Scientific Limited, in New Zealand. Since then, I have been closely associated with Crown Research Institutes, the Ministry for Primary Industries, and the New Zealand forest product export industry, primarily through Stakeholders in Methyl Bromide Reduction (STIMBR), to provide scientific advice and guidance on phytosanitary treatments.

In my company role, I have been closely associated with EDN research in New Zealand over the past six years, including critical reviews of experimental designs, data and statistical analyses, and reports and manuscripts for publication to ensure that the science is robust and internationally acceptable. I can state categorically that the research results for EDN provided by the Crown Research Institutes through STIMBR for the application to register EDN is impeccable and able to stand up to scrutiny by international peers.

Because of our exceptional forest products export industry, New Zealand is one of the world's largest users of methyl bromide. However, increasing external and internal regulatory pressures have been, and will continue to be exerted to limit the use of this ozone-depleting compound over the next few years. Without alternatives to methyl bromide, the New Zealand log export industry could see significant declines in log exports and associated economic losses. EDN was first patented in Australia in the 1990s and has since been registered there for use as a methyl bromide alternative. Efforts are currently underway in the US to begin the registration process, and EDN is an approved phytosanitary treatment for logs in Malaysia. EDN is neither an ozone-depleting compound nor a greenhouse gas.

Under the auspices of a Ministry for Business, Innovation and Employment project, I worked with a team comprised of scientists from the Crown Research Institutes for Plant and Food and for Forestry (Scion) to survey all known literature on potential alternatives to methyl bromide* that showed any possibility for use on logs before export. The results of the literature review found that only EDN offered the potential for replacing methyl bromide as a phytosanitary fumigant for logs. A distant second was held by sulfuryl fluoride, which is a known greenhouse gas and is not useful for controlling insect eggs except under unacceptably high concentrations and lengthy fumigation durations.

In summation, EDN is the only fumigant, in fact the only potential treatment technology worldwide, that can be readily adapted to and applied under commercial conditions safely and economically. Hence, I urge the New Zealand Environmental Protection Authority to register EDN for use on export logs.

* [http://www.stimbr.org.nz/uploads/1/4/1/0/14100200/pfr_10678 - jack armstrong - literature review of disinfestation strategies 2014 finalupdated 18nov2014 3 .pdf](http://www.stimbr.org.nz/uploads/1/4/1/0/14100200/pfr_10678_-_jack_armstrong_-_literature_review_of_disinfestation_strategies_2014_finalupdated_18nov2014_3.pdf)