



Methyl bromide update

January 2020

2020 DEADLINE FOR METHYL BROMIDE RECAPTURE

- Mandatory recapture or destruction of methyl bromide emissions at the end of fumigation is required from October 2020.
- New Zealand is signatory to the Montreal Protocol aimed to control ozone depleting substances such as methyl bromide.
- Methyl bromide is permitted for quarantine use but countries are urged to reduce or replace it.
- New Zealand phased out non-quarantine use of methyl bromide in 2007.

WHAT IS METHYL BROMIDE?

- Methyl bromide is a colourless, non-flammable, toxic gas that has no odour.
- It is used to control quarantine pests in export and imported goods.

WHAT DOES THE 2020 DEADLINE MEAN TO TRADE?

- Trade in forestry products to key markets such as China and India will be affected should the use of methyl bromide be stopped without an acceptable substitute.
- The log trade to India will be disrupted because currently, methyl bromide is the only feasible option for phytosanitary treatment for logs to India.
- New Zealand exported 21.4 million cubic metres of logs in 2018. About 22% of these logs (worth \$790 million) were treated with methyl bromide for export to China and India.
- Fumigation of logs for export constitutes the bulk (92%) of New Zealand's methyl bromide use. The remaining 8% is used to fumigate other export goods and for managing pests intercepted on imported goods at the border.
- In 2017, New Zealand used 586 metric tonnes; the sixth highest user of methyl bromide in the world.

CHALLENGES

- The Ministry for Primary Industries (MPI), Stakeholders in Methyl Bromide Reduction (STIMBR) and Crown Research Institutes (CRI) have been working on finding alternative phytosanitary treatments and reducing methyl bromide emissions.
- Ethanedinitrile (EDN) has been identified as an effective fumigant to replace methyl bromide for the log trade.
- An application to register EDN for use in New Zealand was made by the Czech-based manufacturer, Draslovka, in July 2017.
- Current recapture technology developed by Genera Ltd can recapture most methyl bromide remaining in the headspace of containers but does not meet the target for large log fumigations such as log stacks and ship holds.



CURRENT WORK AND PROGRESS MADE

- Research on the use of EDN as a phytosanitary fumigant and research on reduced application rates for methyl bromide have been completed.
- Results show that EDN is effective against common pests associated with New Zealand logs and that the current methyl bromide application rates can be reduced significantly.
- An application to register EDN for use in New Zealand is being progressed with the EPA.
- STIMBR is investigating non-chemical treatment options such as Joule heating and biological concepts.
- Joule heating involves the use of direct electric current to raise the internal temperature of logs to meet heat treatment requirements. Research has shown that Joule heating is effective in killing all life-stages of insects within logs.
- Work on biological concepts such as modelling insect activity to determine the likelihood of insect abundance and flight activity in order to identify windows of opportunity and areas of low pest prevalence to reduce the need to fumigate is ongoing.

WHAT IS NEXT?

- Scientists have developed an EDN and reduced rates of methyl bromide fumigation efficacy data sets for the pests of concern to key trading partners. The data sets were submitted to key trading partners in 2019 for assessment and negotiation.
- A New Zealand delegation visited China for discussion on EDN and reduced rates of methyl bromide in December 2019. A similar meeting with India has been scheduled for early 2020.

MORE INFORMATION

For more information on methyl bromide, please visit STIMBR website [InFO](#) and for answers to common questions, visit [FAQs](#). The MPI Plant Export Certification Standard for treatment Supplier Programme can be found at [Treatment](#).

