Biosecurity New Zealand
Ministry for Primary Industries
Manatū Ahu Matua

Methyl bromide factsheet

August 2021

DEADLINE FOR METHYL BROMIDE RECAPTURE

- Mandatory recapture or destruction of methyl bromide emissions at the end of fumigation is now required from 1 January 2022 for 50% of the fumigations under sheets and from 1 January 2023 for containers.
- Latest updates on methyl bromide fumigation controls are available at Reassessment of methyl bromide | EPA

WHAT DOES THE NEW CONTROLS MEAN TO TRADE?

- Log trade, mostly to China and India, will be affected as they require fumigation with methyl bromide.
- The log trade to India will be disrupted because currently methyl bromide is the only feasible option for phytosanitary treatment for logs to India. Ship holds require a 900m buffer zone from 1 January 2022 and cannot be treated with methyl bromide after 1 January 2023.
- New Zealand exported $3.61 billion of logs in the year ending June 2021. Twenty percent of these logs ($722 million) were treated with methyl bromide for export.
- 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.

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 by about 50 countries.
- 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.
- Phase out of world non-quarantine use is nearly complete, New Zealand phased out non-quarantine use of methyl bromide in 2007.

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 and is yet to be approved. EPA has published new documents at *APP202804* to access.

- Current chemical and physical recapture systems in New Zealand can recapture 48% and 90% methyl bromide remaining in the headspace of log stacks under tarpaulin respectively. A report is available here: **Assessment of Methyl Bromide recapture regimes – Report**
- Recapture from ship hold fumigation is a problem due to size and access issues.
- Ship hold fumigation will be banned from 1 January 2023.

CURRENT WORK AND PROGRESS MADE

- Work on a systems approach that includes modelling insect activity to identify opportunities and areas of low pest prevalence to reduce the need to fumigate has been completed.
- Research has shown that Joule heating is feasible and effective in killing all life-stages of insects within logs. A pilot plant has yet to obtain finance.
- Debarking is accepted by China and the use has increased to around 9% of log exports.
- EDN is effective against common pests associated with New Zealand logs.
- An application to register EDN for use in New Zealand is being progressed with the EPA.
- Negotiations are underway with both China and India to gain acceptance of EDN.