

# SUBMISSION FORM

For Hazardous Substance and New Organism Applications

**Once you have completed this form**

**Send by post to:** Environmental Protection Authority, Private Bag 63002, Wellington 6140

**OR email to:** [submissions@epa.govt.nz](mailto:submissions@epa.govt.nz)

**Once your submission has been received the submission becomes a public document and may be made publicly available to anyone who requests it. You may request that your contact details be kept confidential, but your name, organisation and your submission itself will become a public document.**

<b>Submission on application number:</b>	APP203660
<b>Name of submitter or contact for joint submission:</b>	Kerry Ellem
<b>Organisation name (if on behalf of an organisation):</b>	Hancock Forest Management (NZ) Ltd
<b>Postal address:</b>	<div style="background-color: black; width: 100px; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100px; height: 15px;"></div>
<b>Telephone number:</b>	<div style="background-color: black; width: 100%; height: 15px;"></div>
<b>Email:</b>	<div style="background-color: black; width: 100%; height: 15px;"></div>

I wish to keep my contact details confidential

The EPA will deal with any personal information you supply in your submission in accordance with the Privacy Act 1993. We will use your contact details for the purposes of processing the application that it relates to (or in exceptional situations for other reasons permitted under the Privacy Act 1993). Where your submission is made publicly available, your contact details will be removed only if you have indicated this as your preference in the tick box above. We may also use your contact details for the purpose of requesting your participation in customer surveys.

The EPA is likely to post your submission on its website at [www.epa.govt.nz](http://www.epa.govt.nz). We also may make your submission available in response to a request under the Official Information Act 1982.

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- I support the application
- I oppose the application
- I neither support or oppose the application

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**The reasons for making my submission are<sup>1</sup>: (further information can be appended to your submission, see footnote).**

Refer attached.

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**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.**

- I wish to be heard in support of my submission (this means that you can speak at the hearing)
- I do not wish to be heard in support of my submission (this means that you cannot speak at the hearing)

**If neither box is ticked, it will be assumed you do not wish to appear at a hearing.**

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**I wish for the EPA to make the following decision:**

Refer attached.

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<sup>1</sup> Further information can be appended to your submission, if you are sending this submission electronically and attaching a file we accept the following formats – Microsoft Word, Text, PDF, ZIP, JPEG and JPG. The file must be not more than 8Mb.



*A Division of Hancock Timber Resource Group,  
A Manulife Asset Management Company*

**Hancock Forest Management (NZ) Limited**  
**Submission to the Environmental Protection Authority**  
**Email:** reassessments@epa.govt.nz

**Application for the reassessment of Methyl Bromide (application number AP203660)**

**Introduction**

Hancock Forest Management (NZ) Limited (HFM NZ) manages approximately 233,000 ha of plantation forest (184,000 productive) on behalf of three investor clients, Taumata Plantations Limited, Tiaki Plantations Company and OTPP Forest Investments NZ Limited. The forests under HFM NZ's management are located in Northland, Auckland, Waikato, Bay of Plenty and Manawatu Wanganui regions.

Logs from our forest are supplied to local processors, but in all regions, there are excess logs and log grades that cannot be utilized by local processors, and these logs are exported, predominantly to China, India, Japan and Korea. HFM NZ clients currently export approximately 3 million JAS of export logs, of which in the past year 2.2 million JAS (~75% of total) was exported to China and India, and therefore required fumigation prior to leaving New Zealand. Of the fumigated logs, 20% required fumigation with methyl bromide. Log export and shipping is managed on behalf of our investor clients by our export agent, TPT Forests Limited.

HFM NZ recognizes the EPA requirement that from October 2020 all methyl bromide application must have recapture technology applied to achieve residual levels below the Workplace Exposure Standard or alternatively be phased out.

HFM NZ is working closely with TPT along with STIMBR and FOA to identify options to meet this requirement, investigating all possible options.

In HFM NZ's view, our clients and the wider industry are still reliant on having methyl bromide in the phytosanitary toolbox, with reasonable workable controls, as there are currently no viable alternatives. Without the ability to treat with methyl bromide export of logs to India would have to cease and export to China would become problematic.

## **Alternatives to methyl bromide**

The key alternatives to methyl bromide are alternative fumigants or debarking.

a. Alternative Fumigants

The only viable alternative fumigant that has been identified to replace methyl bromide for log fumigation is Ethanedinitrile (EDN). As the EPA is aware an application has been submitted for registration of EDN for use in NZ. It is unknown if, or when this product will be available to be used as a replacement for MB fumigations. At this stage from all reports from STIMBR, NZ FOA and TPT, HFM NZ is not confident that EDN will be approved within the timeframe required to be commercially available as a phytosanitary treatment by the October 2020 deadline.

Phosphine is a viable alternative fumigant but is only currently accepted for log exports to China. Due to the time required to achieve efficacy, phosphine is also only viable for in-hold treatment, meaning it cannot be used for treating deck cargo.

Methyl bromide is currently the only fumigation currently accepted by India and therefore there are no alternatives available for this market.

Both Japan and Korea currently permit methyl bromide treatment on arrival, it is possible that in future like many other countries, they could demand that products are treated in the country of origin prior to export.

b) Debarking

Whilst currently accepted as a control (risk mitigation) for China, debarking is not an accepted phytosanitary treatment and therefore at any stage if deemed to not meet the phytosanitary requirements (by MPI or China) the debarked logs will be required to be fumigated. Debarking is only a partial solution, suited for high end quality logs produced

from high volume production sites to mitigate the risk of insect infestation. Of note, debarking is not considered a phytosanitary control by India.

HFM NZ clients have considered the investment in additional debarking, but due to the high risk of failure have opted not to pursue this option.

## **Recapture Technology**

Large scale “log stack” fumigation recapture technology has been developing since 2010 with significant learnings on recapture and the destruction and reuse options developed. Significant investment has been committed by industry parties, and recapture technology is now in routine use at our export ports. However the major barrier remains that the recapture standard set by the EPA in the 2010 approval cannot practically be met, even with the best available recapture equipment. We are advised that even with future improvements in technology, it is extremely unlikely that the required residual levels of 5ppm (Workplace Exposure Standard) could be practically achieved.

At a bigger picture level, we question whether the Workplace Exposure Standard (WES) is the appropriate measure for recapture given no worker is exposed to the conditions within the treatment envelope. Tying the recapture limit to the WES also creates the practical difficulty that if the WES is ever changed, this has significant ramifications for recapture requirements.

The unachievable limit is creating a strong deterrent to making the substantial investment in additional recapture equipment in NZ to service a higher proportion of exports, given there is a substantial risk of the equipment becoming redundant in October 2020. This road block to further investment in recapture technology could be removed by applying a more realistic recapture standard, opening the way for further investment to ensure that recapture technology can be applied to 100% of log stacks.

Recapture following in-hold treatment remains an issue as there is currently no available technology for recovering gas from such a large space. Given the high reliance on in-hold treatment it is imperative that the industry resolves this technology gap and significant investment will be required to achieve this. Again the unachievable limit combined with the looming deadline creates a deterrent to investment in this area.

## Shipping Options

The majority of log exports are shipped to the international markets using specially fitted bulk carriers capable of carrying logs both in hold and on deck. HFM NZ has investigated the alternative of utilising shipments with only below deck cargos to China, enabling Phosphine treatment as an alternative.

The effects of shipping without on deck cargo are:

- Shipping costs will increase as costs will increase by approximately 50% as the shipping cost will be spread over a reduced cargo (approximately 66% of the current cargo)
- Approximately 33% more vessels will be needed to carry the displaced cargo
- Due to increased shipping the carbon footprint for log exports increases by approximately 50% (due to increased number of ships to transport the same volume).

Whilst we would try to mitigate these effects utilising alternative on-deck cargo, including logs going to destinations allowing treatment on arrival, this will not always be practical and only partially offsets the above issues.

## Conclusions

Unless alternative fumigants or processes which provide viable phytosanitary solutions become available, along with approval of such alternatives by our export market governments/authorities, ability to fumigate with methyl bromide remains essential to maintaining the log export trade.

NZ export log volumes would reduce if methyl bromide was unable to be used for pre-shipment phytosanitary requirements. Exports to India would have to cease until an alternative is established and exports to China would be significantly impacted with costs to market increasing.

Of note, the export markets generally utilize specific grades, lengths and quality characteristics that cannot be processed in the domestic market (due to processing capacity and quality of fibre required by domestic processors). Inability to sell these grades will have flow on effects to the domestic market.

**HFM NZ Submission:**

**Hancock Forest Management NZ support STIMBR in seeking a modified reassessment of certain controls introduced in the 2010 reassessment namely (refer application);**

1. The definition of recapture technology be revised to reflect the highest practicable level of recapture that is reasonably achievable through current best practice technology, eg through amending the interpretation of 'Recapture Technology to; *"Recapture technology is a system that mitigates methyl bromide emissions from fumigation enclosures such that the residual level of methyl bromide in the enclosed space is reduced by at least 80% from that at the end of the fumigation period."*
2. The deadline for recapture technology be limited to on-port and container fumigations only, and a new deadline of a further 10 years be imposed on ship-hold fumigations, recognising the technological difficulties of resolving this issue.
3. Review clause 6(5) of Table C2 regarding buffer zones, to be fit for purpose based on the results of scientifically rigorous monitoring and taking into account any changes to the recapture requirements, if these are revised as requested.