

SUBMISSIONS OF TAURANGA FUMIGANT ACTION GROUP IN OPPOSITION TO APPLICATION BY STIMBR FOR REASSESSMENT OF CONTROLS IN REGARD TO METHYL BROMIDE

These are the submissions on behalf of the Tauranga Moana Fumigation Action Group (TMFAG) in regard to Stakeholders in Methyl Bromide Reduction Inc 's (STIMBR) application to the Environmental Protection authority for an reassessment under s 63 of the HSNO Act 1996 of the controls over the use of Methyl Bromide (MB).

The application seeks to amend the current controls over the uses of MB as set out in the 2010 EPA Decision HRC08002 (2010 Decision) by:

- (1) Change the current requirement for the recapture of MB from log fumigations by October 2020 from its current effective requirement that no more than 5ppm is released into the atmosphere to an amended requirement that no more than 20% of the residual MB at the start of the fumigation be released into the atmosphere;
- (2) Extend by a further 10 years the requirement for recapture for ship hold fumigations upon the condition that further efforts are made to develop ;
- (3) Make requirements for the strengthening of the buffer zone requirements at the completion of recapture of MB.

In relation to the third point there does not appear to be any actual changes sought in the STIMBR submissions and in any case this would not appear to be a matter for the EPA to consider given that buffer zones and many other workplace controls are now set in Part 14 of the Health and Safety at Work (Hazardous Substances) Regulations, rather than in the HSNO approval for methyl bromide.

This matter aside TMFAG opposes the first and second points of amendment upon the following basis:

- (a) The export logging industry has not made sufficient efforts since 2010 to develop better technology for recapture of or elimination of MB.
- (b) There does appear to be available/feasible approaches to dealing with logs for export that would be able to meet the current recapture requirements that will be introduced in October 2010.
- (c) The current monitoring of MB from log fumigations is insufficient and does not support the STIMBR claims that there is no ongoing risk to health and the environment. In fact, there are significant health and environmental effects of MB that will only be aggravated by the application being granted.

Ultimately it is submitted that the application is essentially made upon the basis the industry does not wish to spend more money on research or better technology for recapture of MB. With respect this is not a valid reason for the amendment. Given the ongoing threat to health and the environment of the use of MB the MB related industry on balance there will be a net benefit in requiring the log export industry to make the additional investments required to meet the current October 2020 requirements.

No development of technology

It is submitted that from the STIMBR submissions it is not obvious that any recent and concerted efforts are being made to develop technology to meet the EPA recapture requirement by October 2020. The most recent research report on the issue referred to was issued in 2014.¹ No details are provided of any more recent efforts at developing alternative technology.

¹ Page 8.

Effective recapture technology exists.

It is submitted that there does appear to be existing alternative technology for recapture of MB from log fumigations through the recapture through charcoal method provided by the firm *Nordiko*. It is understood that this technology has been used on large volume fumigations in Australia. It is understood that Nordiko has offered to carry out tests on using their technology on log fumigations but log exporters associated with STIMBR have advised that they will only allow such tests if STIMBR can have sole possession of the results. As a result, it is understood that no tests have been carried out.

It is noted in the STIMBR submissions in support of the application it is suggested that MB recapture should not involve the disposal of waste that cannot be dumped at landfill. This appears to be directed at the charcoal recapture approach which involves burying used charcoal in sealed drums. In this regard it is submitted that it has not been shown that this would be an environmentally worse approach than allowing significant amount of MB into the atmosphere. It is also perceived that the true reason for the reluctance by STIMBR members to use charcoal technology is the addition costs as compared with venting to the air.

Alternatives to fumigation

It is further submitted that there are viable alternative to MB fumigation of logs.

Operators such as Kaingaroa Timberlands are working towards having in place by 2020 debarking technology so that their export logs will be debarked and as such will not need MB treatment. It is accepted that smaller operators may need different/more mobile debarking technology to achieve this but this would be possible with further investment. In the STIMBR submissions² it is only stated that debarking may be more expensive without any details why it is not feasible.

It is also accepted that India does not yet accept unbarked logs that are not treated by insecticides but it is understood that this could be potentially changed in the future through negotiations through MFAT.

It is also noted that if timber is milled or cubed then fumigation would not be necessary. It is submitted that the current scheme of allowing the fumigation of raw logs with MB does not fully take into account the environmental and health costs of fumigations and as such artificially lowers the costs of raw log exports and the comparative benefits of the alternative of processing timber. If the current 2020 deadline for total recapture was kept in place this would allow the comparative costs and benefits of the two approaches to log exports to be better reflected and in doing so will better incentivise value added processing of timber for export.

Lack of suitable facilities for fumigations

It is further submitted that the type of environment for MB fumigations as used at Port of Tauranga – being log stack and ship hold fumigations- is not suitable for effective recapture of MB and is the key reason why the October 2020 standards may not be able to be met.

In this regard reference is made to the decision of the Environment Court in *Envirofume v BOPRC* [2017] NZEnC 12 that in order to comply with fumigation standards in regard to MB there needs to be an integrated approach- involving the Port of Tauranga, log exporters, fumigators and stevedores

² Page 27

– where there are dedicated areas for MB fumigation and perhaps a dedicated building to contain the gas.³

The reality is far from this with Port of Tauranga allowing fumigations to take place over large areas on the wharf and shipside within broad regulative restrictions.⁴

It is submitted that is an investment is made by all relevant parties in the type of integrated approach suggested by the Environment Court- such a dedicated fumigation area/building- then the October 2020 standards could be met.

No progress with recapture from ship hold fumigations

In particular, with regard to fumigation of ship holds, there does not appear to have been any progress in developing technology to improve recapture MB from ship holds since 2010 and no immediate prospect of doing so in the future.

In this regard, it is noted that in the EPA Decision in 2010 Genera and other fumigators made similar statement about lack of technology for ship hold fumigations⁵. From the STIMR submission, there appears not to be any prospect of development of appropriate technology on the horizon.

As such it is submitted that granting the requested extension of 10 years for the implementation of recapture of MB for ship holds will likely only result in a further 10 years of no progress being made.

Lack of evidence that the applied for 80% recapture rate can be met

It is further submitted that the claim in the STIMBR submission that at the Port of Tauranga Genera fumigations are currently meeting the 'effective recapture' rates 80% recapture of remnant MB⁶, that is suggested as the amended standard, is not accepted.

In the recent application made by Genera to the Bay of Plenty Regional Council to vary the terms of their resource consent⁷ the only evidence of 80% refers to 2 trials on log stack fumigations of unspecified detail⁸. This reflects the most recent information that TMFAG had received from Genera as presented at a recent stakeholders meeting at BOP Regional Council that Genera was still trialling ways it can measure recapture levels of remnant MB.

As such overall it is submitted that if the variation to the recapture rates are granted there is no immediate way of ascertaining whether the 80% recapture rate can or will be met

Concerns regarding current monitoring at Port of Tauranga

As a further matter TMFAG has major reservations about the claims in the STIMR submissions that current monitoring of MB levels from fumigations from Port of Tauranga establish that the TELS and WES levels are meeting currently standards.

³ [130]

⁴ *Fumigation Procedures for Port of Tauranga* March 2015.

⁵ Para 16.11.26

⁶ Page 9

⁷ Becca, Genera Resource Consent 62719 Condition 5C.1, Change to date 26 June 2019

⁸ Above Page 15

In this regard reference is made to the decision of the Environment Court in *Envirofume v BOPRC* [2017] NZEnC 12. In this decision it was noted that the monitoring of log stack fumigations at Port of Tauranga was insufficient and what was required was constant monitoring points along the wharf and pathways through the wood stacks, as well as instantaneous and relocatable monitoring.⁹

The *Envirofume* decision also notes that an audit of Genera monitoring results indicated that log fumigations at the Port of Tauranga were not meeting required TEL levels. It was noted that against a limit of 1ppm measurements of 63ppm and on one occasion of 212 ppm had been recorded.¹⁰

As a final point it is noted that the PID monitors used at Port of Tauranga are for all ambient gasses and not specially for MB.

Concerns over meeting WES at Port of Tauranga

It is also submitted that there are concerns over WES are being currently met at Port of Tauranga, as claimed in the STIMBR submissions.

In this regard it is noted in the *Envirofume* decision that with the WES of 5ppm it was noted that this was inadequate for workers who work more than 12 hours a day and an average of 2.5ppm may be more appropriate.¹¹

It is also noted that while Genera workers involved with the fumigations at Port of Tauranga are monitored for MB exposure no others working or otherwise in the vicinity of the fumigations at the port are not. It is submitted that for each PCBU involved at the fumigation area at the port this is contrary to Reg 29 of the *Health and Safety at Work (General Risk and Workplace Management) Regulations 2016* which requires each PCBU to ensure that no person in workplace is exposed to a hazardous substance at levels that exceed prescribed exposure standards and under Reg 30 that requires a PCBU who cannot be satisfied on reasonable grounds that this is the case to carry out exposure monitoring.

In the environment at the Port of Tauranga there are a wide variety of people in the vicinity of log fumigations including stevedores, transporters and those on ships. None of these individuals have the protective clothing that fumigators have. In these circumstances given that no exposure monitoring is carried out it is submitted that the relevant PCBU's – including the fumigators, log exporters and the Port of Tauranga- cannot be reasonably satisfied that WES exposure standards are not exceeded.

The fact that the exposure standards have in the past been exceeded is illustrated by the incident that occurred at the Port of Tauranga on 9 March 2018 when 4 stevedores were hospitalised with symptoms consistent with MB poisoning while loading a ship close by to where log stacks were being fumigated. Genera was subsequently issued with abatement notices by Bay of Plenty Regional Council for failing to monitor downwind from the fumigated log stacks, fumigating within 100 metres of the port boundary and failure to submit a fumigation plan.¹²

⁹ [118]

¹⁰ [112]

¹¹ [117]

¹² *Summary of 8 March 2018 incident at the Port of Tauranga*, Bay of Plenty Regional Council

This incident also shows that the statements made in the STIMBR submissions that monitoring and WES standards at the Port of Tauranga have been fully complied with and there has been no ill effects from MB¹³ is not correct.

Global warming effects

One matter not emphasised in the STIMBR submissions is the effect of MB in depleting the ozone layer and in doing so adding to current global warming. In this regard it was noted by the Environment Court in *Envirofume v BOPRC* [2017] NZEnC 12 that the effect of oxidising the ozone layer is 60 times greater than CFCs.¹⁴ It is for this reason that under the *Montreal Protocol* – of which New Zealand is a signatory- the use of MB is to be minimised and if used emissions are to be restricted by recovery or containment.

Despite this the use of MB in New Zealand has of recent years been steadily climbing and at present New Zealand is the highest industrial user of MB with 7.7% of global emissions – Port of Tauranga alone contributing 2.5%.¹⁵

The planet is currently facing a global warming crisis. In these circumstances it is TMFAG's submission that it will be inappropriate to allow the application which will in effect allow further increases in MB emissions – to match anticipated log export increases – over the next 10 years.

Concluding comments

For the reasons set out above, it is TMFAG's submission that the effect of allowing the application would impose significant increased wider environmental and health costs of the use of MB in New Zealand over the next decade. These wider costs will continue to be borne not by the timber exporters but others. For example, government agencies such as EPA, Worksafe, regional and local councils will continue to have to expend resources on controlling and monitoring the use of MB. Workers and members of the public will continue to potentially suffer the health effects of MB exposure. There will be increased global warming.

The justification argued for these increased costs in the STIMBR submissions are that if the application is not granted then the returns from the log export trade will be detrimentally affected.

It is TMFAG's submission that given these overall costs and benefits it the appropriate outcome would be refuse the application and require the log export industry to invest in technology and approaches that will allow for the current October 2020 standards to be met. For example, increased use of debarking, contained fumigation areas/buildings and charcoal recapture.

Thank you for considering our submission.

Tauranga Fumigant Action Group

¹³ Pages 31, 40 and 41.

¹⁴ [38]

¹⁵ *Envirofume v BOPRC* [2017] NZEnC 12 [88]-[90]