

**Tauranga Moana Fumigant Action Group**

**submission on**  
**HS application APP202804**  
**to the**  
**Environmental Protection Authority.**

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*This submission related to an application by:*

*Lucebi Zavody Draslovka a.s. Kolin, for the purpose of importing ethanedinitrile (EDN), a fumigant for use on timber/logs under commercial conditions.*

*Tauranga Moana Fumigant Action group opposes this application for the reasons outlined below. The group wishes to speak in support of its submission at any hearing.*

*The group requests that the EPA rejects the application and requires the application to undertake further studies on environmental and health effects, or consider an alternative product or method.*

## 1. BACKGROUND

Tauranga Moana Fumigant Action Group ('TMFAG') formed in 2017 as registered incorporated society, following environmental and health and safety concerns relating to the use of the fumigant methyl bromide at the Port of Tauranga. The groups objective is to stop the use of methyl bromide, or require full recapture if it is to continue to be used. This is in accordance with best practise internationally, and the EPA in its 2010 reassessment of the substance for use in New Zealand.

TMFAG mission is 'kia hiwa nga tuku' ('to be vigilant on all sides') and it aims to:

- Seek to ensure the full recapture of fumigant gases that are used at the Port of Tauranga. For methyl bromide, the existing resource consent requires 100% of container fumigations 30 April 2018 and 100% of log and timber fumigations by 30 April 2019,
- That the Environmental Protection Authority's 2020 100% recapture deadline is adhered to and enforced by the relevant regulatory authorities,
- Educate and advocate for safe and legal regulated use of all fumigants for workers for the benefits of the community health and wellbeing and to protect both the local and global environment
- Promote regulatory frameworks that will avoid significant adverse effects from continued use of methyl bromide or alternative fumigants.
- Support regulatory changes to ensure urgency is given to promote and progress towards a more sustainable forestry and export sector,
- Promote and support alternatives within the Industry, away from the use of fumigant gases (such as market negotiations, debarking etc) and/or the establishment of a purpose-built recapture facility, regardless of the fumigant type used.

## 2. SUBMISSION OVERVIEW

TMFAG consider that the complexities associated with commercial fumigation give rise to the history non-compliance with resource consent conditions, and that alternative fumigants (eg EDN) will have similar challenges when used in the same environment by the same operators.

The group is however supportive of the forestry sector growth plans, sustainable economic development, particular for regional New Zealand. We see an opportunity for New Zealand to reposition its forestry sector in an environmental sustainable and social responsible way.

There is no environmental impact assessment associated with the application which is the subject of this submission. The risks to port environments (where fumigation activities are undertaken), surrounding harbour environments and local communities is therefore unknown and uncertain.

The probability and magnitude of adverse impacts from the use of EDN as a commercial fumigant is high, based on historical use of fumigants in New Zealand. The risk (probability of occurrence x consequence) of adverse environmental impacts is unknown, but should be critically assessed by the EPA prior to any approval for importation.

TMFAG seeks the further assessments are done to ascertain the safety of EDN when used under commercial conditions, prior to any importation approval. The groups key concerns are outlined and discussed further below.

In summary, TMFAG seek the following key requests:

1. That more comprehensive studies are undertaken on human health effects, environmental effects (including aquatic toxicity), and the potential for the substance to act as a bacteria mutagen.

2. That the EPA implements a more appropriate approach to national regulation (considering the failings for methyl bromide regulation at a Local Government level) -
3. Any importation approval should be conditional on the development of an offsite fumigation facility, and require scrubbing of all log stacks following fumigation.

### **3. Submission Points**

The submission points below relate to the risk/benefit assessment from the subject application.

#### 3.1 Limited information/studies

There are insufficient studies available for a clear understanding of both the human toxicity and environmental effects of any exposure to EDN. The key issues of primary concern that should be resolved prior to any importation approval are;

- 1) The appropriate concentrations of EDN following fumigation and upon which time tarpaulin removal could occur. TMFAG note that the Australian guidelines (APVMA 2013) require 1ppm and significant venting time as a condition of use. It is unlikely that these restrictions would be logistically or commercially viable if EDN is to be used as 'drop in replacement' for methyl bromide as proposed by the applicant. It seems likely that alternative methods and operations would need to be implemented, for example the development of an offsite fumigation facility.
- 2) The toxicity of EDN to humans (ie Port workers) at chronic low exposure. There is no scientific information available on this issue.

#### 3.2 Aquatic toxicity

The application refers to EDN as being 'very toxic' to aquatic organisms, and 'may cause long term adverse effect in the aquatic environment'. This is a serious concern given the likely quantities that will be used at the Port of Tauranga, neighbouring the Tauranga Harbour. Studies that are specific to use in other regions/countries cannot be easily transferred and applied to the New Zealand context.

#### 3.3 Mutagen

The subject application notes that one study found that EDN may be associated with the mutagenic behaviour of some bacteria. There are no relevant studies to show the likelihood of bacteria mutagen behaviour in the New Zealand context. We understand mutagen behaviour is extremely challenging to control or reverse. This should be a key concern to the EPA, given the proposal location of use is likely to be at New Zealand largest export Port. A precautionary approach to any use of this fumigant should be undertaken, to prevent potentially devastating consequences for our unique environment.

#### 3.4 Regulation/compliance/scale

It is our groups view that Local Government regulation is not of appropriate expertise or capacity to enforce the stringent safety requirements that must be conditional upon the use of this fumigant on such a massive commercial scale.

The listed risks have not identified the adverse impact of improper use on a large scale, such as commercial fumigation of significant log piles at the Port of Tauranga. New Zealand Ports tend to be located close to local communities, and obviously aquatic ecosystems.

Use of the fumigant methyl bromide at the Port of Tauranga has a long history of non-compliance. The most serious breaches include tarpaulin breakages during fumigation, incorrect signage displayed during venting, and exceedance of safe concentrations at the site boundary. All of these compliance issues have occurred despite close regulation and enforcement orders issued by the Regional Council.

It is very likely that the same fumigation company, personnel, locations, and methodologies etc, will be undertaking the activity with EDN if it is approved. The subject application refers to the benefits including its ability to be a 'drop in replacement for methyl bromide'. It is our group's submission that there is therefore a very high probability that adverse human health, and environmental effects are likely to occur.

TMFAG submits that the risks of accidents, incorrect use, and multi-party use of sites (such as the fumigation location at the Port of Tauranga) have not been adequately addressed in this application.

### 3.6 Limited use worldwide

The application notes that the substance is not approved for use in most regions around the world, including Europe, United States, Canada, and Japan. This should be considered a serious red flag for the EPA.

Section 3.2 of the application highlights Australia as the only jurisdiction that has permitted the use of this substance for fumigation purposes. Upon further investigation (ie not noted within this application), it is clear there are serious concerns and strict safety regulations associated with its use in Australia. Specifically, a condition of use that scrubbing is required for up to 6 hours until minimal concentrations remain. This is a fundamental condition of use that should be enforced if EDN is to be approved in New Zealand.

It is disappointing to find that the scenarios and benefits matrix in Tables 5 and 6 of the application make no mention of the limitations of the scrubbing method, which would increase fumigation timeframes and impact logistics. In our view, it is unlikely that the necessary safety controls associated with the use of EDN, will result in the substance being the 'drop in replacement' for methyl bromide that the applicant claims.