



Petition 2002/182 of Claire Gulman and 1,452 others

Report of the Local Government and
Environment Committee

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Recommendation

The report of the Local Government and Environment Committee makes the following recommendations to the Government:

- that the Environmental Risk Management Authority be asked to reassess methyl bromide and set new conditions as soon as possible.
- that the recapturing of methyl bromide during post-fumigation ventilation be promoted and, if it proves practical and affordable, require it as a condition of use.
- that there should be no more exemptions for critical use for the strawberry industry.
- that the Department of Labour undertake regular best-practice audits of operators using methyl bromide.
- that the Ministry of Health monitor the long-term health of people reported to have been exposed to methyl bromide.
- that operators be required to display prominent hazard signs when containers are being fumigated with methyl bromide.
- that a public notification process be explored about the locations of registered containers to be fumigated in residential or light industrial areas.
- that the development of zones be explored to encourage the localisation of fumigation and spraying.

Background

This petition respectfully requests that the House enact legislation to phase out by 2010 the use of methyl bromide as quarantine and/or pre-shipment fumigant in New Zealand without any exceptions.

This petition arose from the petitioner's concern of a possible link between the fumigant and cases of motor-neurone disease in people who had worked in the Port Nelson area.

Montreal Protocol

In 1987 the Montreal Protocol on Substances that Deplete the Ozone Layer was signed to phase out ozone-depleting substances; methyl bromide is a stratospheric ozone depletory.

The protocol requires the production and use of methyl bromide to be phased out by 2005, except for quarantine and pre-shipment use in developed countries. This deadline has been extended, with an exemption for critical use where there are no technically and economically feasible alternatives.

Countries are urged, however, to minimise methyl bromide use and emissions and to use non-ozone depleting technologies where possible.

We were pleased to learn that an international expert working group will meet in October 2006 to develop a world standard on alternative fumigants to methyl bromide. We understand that it may take time to produce such a standard.

Methyl bromide

At room temperature, methyl bromide is a gas that can be used as a pesticide to fumigate soil, spaces, structures and commodities. Domestically, it is used for the treatment of wood and forest products, the sterilisation of strawberry beds and to control strawberry fruit rots, and for general quarantine purposes, such as the fumigation of imported household goods and other items as directed by the Ministry of Agriculture and Forestry. Provisionally, 196.82 tonnes of methyl bromide were imported in 2005. Before 2002 the importation of methyl bromide was trending downwards. Since then there has been a marked increase in the importing of the fumigant.

Alternative fumigants

We received advice on alternative fumigants to methyl bromide. For example, we understand that small-scale trials using phosphine have been successful against the *Arhopalus* beetle; large-scale trials have yet to be performed.

However, importing countries specify which fumigants they will accept to fumigate biomaterials crossing their borders. We understand that officials are in negotiations, on a country-to-country basis, with our trading partners to consider using alternatives to methyl bromide. We heard, for example, that China accepts wood products carried below deck which have been fumigated with phosphine. Wood products carried above deck must be fumigated with methyl bromide.

We were advised that the steam treatment of large volumes of logs is impractical. However, steam sterilisation is an effective fumigant of targeted pests on fresh fruit and vegetables. The Green Party believes that this provides an effective fumigant treatment and should be made mandatory for these consumables.

We were pleased to learn that progress is being made in this area but recommend that the Environmental Risk Management Authority be asked to reassess methyl bromide and set new conditions as soon as possible.

Recapturing of methyl bromide

We were pleased to learn that a trial to recapture methyl bromide gas is to take place. We understand that this process significantly restricts the amount of gas released into the atmosphere by capturing it, using charcoal as the absorbent. Though it is possible to extract

and recycle the methyl bromide, the charcoal used is to be buried, and there is no risk to the environment.

We recommend that the Government promote the recapturing of methyl bromide post-fumigation ventilation, and if it proves practical and affordable, require it as a condition of use.

The strawberry industry

The strawberry industry uses methyl bromide as a soil fumigant under critical use exemption. The industry has until 2007 to find an alternative fumigant and is working closely with HortResearch in this area. We heard that cost-effective alternatives are now available.

We recommend that there should be no more exemptions for critical use for the strawberry industry.

Health and safety

Operators using methyl bromide have a duty to assess its hazards and to manage risks using the principles of elimination, containment, or minimisation, as required by the Health and Safety in Employment Act 1992. Furthermore, specific controls on the use of fumigants are imposed by the Hazardous Substances and New Organisms Act 1996 and subsequent Regulations.

The Department of Labour has conducted a survey to assess the rate of decay of methyl bromide under post-fumigation ventilation. We understand that it takes approximately 40 minutes for methyl bromide to decay to the time-weighted average workplace-exposure standard level of five parts per million, once a typical container is opened. Operators test and document the level of residual methyl bromide gas left in the container.

We were disappointed to learn that the practices of some operators fail to comply with industry standards, particularly regarding the duration of ventilation.

We were advised that the Department of Labour has conducted hygiene surveys of workplace sites where staff have been possibly been exposed to methyl bromide. Between December 1999 and April 2006 nine reported incidents of exposure to methyl bromide were investigated, some of which involved more than one person. We understand that these people received an initial health assessment but no long-term follow up. We are not satisfied that these people have been adequately monitored.

We recommend that the Department of Labour undertake regular best-practice audits of operators who use methyl bromide.

A secondary risk may arise if methyl bromide re-accumulates when a container is closed and re-opened at a later date. In these circumstances we endorse the department's recommendation that the door on such containers should be left open for 15 to 30 minutes before unloading.

Fumigation of containers in the community

Containers (particularly those holding household goods) may be fumigated in urban or light industrial zones. Neither the owner nor the agent fumigating containers is required to

notify the public that fumigation will be taking place. The agent is required to display signage indicating that a hazardous substance is in use, but we are not satisfied that this practice offers adequate public protection.

We recommend that a process be explored that notifies the public of the locations of registered containers to be fumigated in residential or light industrial areas.

We recommend a requirement that prominent hazard signs be displayed when containers are being fumigated with methyl bromide.

We recommend that the development of zones be explored to encourage the localisation of fumigation and spraying.

Exposure to methyl bromide and motor-neurone disease

We have considered the report prepared by Dr Ed Kiddle, Medical Officer of Health, Nelson-Marlborough District Health Board, which investigated the epidemiological relationship between a cluster of people diagnosed with motor-neurone disease in the Nelson region and the use of methyl bromide at the port of Nelson.

We have been unable to obtain any evidence that links methyl bromide and motor-neurone disease.

We recommend that the Ministry of Health monitor the long-term health of people reported as having been exposed to methyl bromide.

Conclusion

We have considered the petition of Clare Gulman and 1,482 others requesting that the House enact legislation to phase out by 2010 the use of methyl bromide as quarantine and/or pre-shipment fumigant in New Zealand without any exceptions.

We are sympathetic to the issues raised by the petitioner, and thus have recommended the phasing out of methyl bromide in the strawberry industry. With respect to the treatment of wood and forest products, we recognise that methyl bromide is the international standard and have recommended that it be recaptured if practical. We note that while New Zealand is negotiating with its trading partners to trial alternative fumigants, there has been limited acceptance of them.

We are pleased that trials are being conducted to find cost-effective alternative fumigants to methyl bromide and that progress is being made internationally towards finding universally acceptable alternatives. We are also pleased that a trial of a method for recapturing methyl bromide is taking place. If the trial is successful, we recommend that recapturing methyl bromide during post-fumigation ventilation be required as a condition of use.

We have made a number of recommendations to the Government urging the safe use of methyl bromide within New Zealand, and will monitor progress in this area.

Minority view of the Green party

The Green Party is concerned that little progress has been made in meeting our commitments, as a signatory to the Montreal protocol and the Vienna Convention for the

Protection of the Ozone Layer, to reduce our consumption of ozone depleting substances and to ensure that any emissions of methyl bromide are minimised. As a result, our use of methyl bromide has steadily increased.

We are also concerned that there are no financial or other incentives or penalties on industry that would require it to phase out its use of methyl bromide, or to recapture all the gas that is used, and no time frames, either, to require the use of alternative technologies to methyl bromide.

We note that steam sterilisation is an effective fumigant for fruit and vegetables, and believe this should be made mandatory for these consumables.

We are concerned that there are few controls to ensure that the fumigant is used safely and no monitoring of methyl bromide operators. We do not believe methyl bromide fumigation should be permitted to take place in urban or residential environments. We believe methyl bromide fumigation should only be permitted to take place in dedicated sites that are located in industrial zones in cities/town where it is used in New Zealand.

Appendix

Committee procedure

Petition 2002/182 of Claire Gulman and 1,452 others was referred to the Local Government and Environment of the forty-seventh Parliament and reinstated in the forty-eighth Parliament.

Submissions received

We received submissions from the petitioner, the Ministry for the Environment, the Ministry of Health, the Environmental Risk Management Authority, the Ministry of Foreign Affairs and Trade, Biosecurity New Zealand, the Department of Labour, Dr Ed Kiddle, and the Port of Nelson.

Committee members

Steve Chadwick (Chairperson)
John Carter (Deputy Chairperson)
Georgina Beyer
Mark Blumsky
Martin Gallagher
Hon Marian Hobbs
Eric Roy
Hon Dr Nick Smith
Mētīria Turei

Sue Kedgley replaced Mētīria Turei for this item of business.