

Methyl Bromide Fumigation Issues

March 2010

The purpose of this note is to draw attention of the logistics and supply chain industries to the requirements of the AQIS Onshore Fumigation Scheme and the responsibilities of the parties in the logistics chain.

From 1st April 2010 all AQIS directed methyl bromide fumigations on imported cargo and goods will only be allowed to be carried out under the AQIS Onshore Fumigation Scheme. The Scheme requires compliance with the current [AQIS Methyl Bromide Fumigation Standard](#) and may have operational and cost impacts on those parties in the logistics chain who do not meet the current requirements.

Four major areas of concern have been identified and are listed below.

1) Suitability of fumigation sites, risk assessment and safety

Any non compliance with these mandatory requirements will render sites that are currently used for fumigation unsuitable

What does this mean for industry?

Unless sites where fumigations are conducted, including Quarantine Approved Premises, can comply with requirements such as being able to provide a 3 meter clearance around sheeted fumigation enclosures plus a range of other conditions, they will not be able to carry out fumigations. This may well mean that AQIS directed fumigations will have to be directed to other compliant premises.

2) Suitability of cargo to be fumigated in containers

For a fumigation to be effective sufficient airspace is required to allow gas penetration around and between the commodity. Any container packed densely and without sufficient free airspace around the cargo, **including air space between the container floor and cargo**, cannot be fumigated in the container.

What does this mean for industry?

Fumigators will assess each container to be fumigated for compliance with the requirements to allow for effective circulation of the fumigant. Containers that are packed tightly or where cargo is not on pallets must be unpacked before fumigation. Importers need to be aware of these requirements. It should also be noted that AQIS may well audit containers fumigated offshore for compliance with these requirements.

3) Suitability of commodities and impervious wrapping / surface coating requirements

There are a wide range of commodities that are not suitable for methyl bromide fumigation such as certain rubber goods, vinyl products etc. refer to (www.fao.org). Additionally, because Methyl Bromide cannot readily penetrate paint, lacquer and plastics, AQIS requires that treatment be carried out before such coatings or wraps are applied.

What does this mean for industry?

Under the AQIS Methyl Bromide Fumigation Standard it is the fumigators' responsibility to ensure compliance. Fumigators will be making decisions on suitability of commodities based on documentation and/or visual inspections. For instance the wrapping of a carton may comply but the retail packs within the carton may not. It will be up to the cargo owner to provide the fumigator with a statement that the commodity and the wrapping/coating etc are suitable for fumigation in all respects.

4. Ventilation of cargo after completing the fumigation

The Australian Standard regarding exposure to toxic gasses establishes a safe working limit or Threshold Limit Value (TLV) of 5ppm for Methyl Bromide. Accordingly in order for containers to be released by the fumigator it is mandatory that the final methyl bromide reading must not exceed 5 part per million (or 19 milligrams per m3).

What does this mean for industry?

Whilst most fumigators use forced ventilation to achieve rapid dispersal of the fumigant, a wide range of cargo and packaging is not easily ventilated and requires much longer than the current four hours or so generally applied as being deemed sufficient. Indications are that in excess of 48 hours may be required to comply with the standard and it is incumbent on the fumigator to monitor the residual fumigant levels in the container. Fumigation areas in suitable premises may be occupied for much longer periods of time before removal.

Whilst the fumigator may achieve compliance with the 5ppm TLV that applies to the atmosphere in the container and risk area the residual methyl bromide in the container may well be in excess of the standard due to continued release of the absorbed fumigant from slowly desorbing packaging material and commodities. In line with OH&S requirements fumigators will place labels on treated and released containers advising that some additional ventilation time must be allowed before accessing the cargo and container at the unpacking point.