



Version 1.1

# BMSB Consignment suitability



As temperatures drop and day length shortens, brown marmorated stink bugs (BMSB) seek refuge in dark, warm locations to 'overwinter'. While BMSB access homes and buildings to overwinter, they will also access anything else they can find that provides a suitable overwintering location. Certain goods being exported to Australia and New Zealand have been identified as providing locations suitable to BMSB overwintering and therefore require treatment to ensure they are free from BMSB.

The type of goods subject to mandatory treatment are different for Australia and New Zealand, see [agriculture.gov.au/bmsb](http://agriculture.gov.au/bmsb) and [biosecurity.govt.nz/importing](http://biosecurity.govt.nz/importing) for details.

In order to conduct an effective BMSB treatment, goods must be presented in a manner that allows the heat or fumigant to reach all external and internal surfaces of the goods accessible to BMSB. For example, this includes the surfaces of the innermost brick in a pallet of bricks or tiles, the surface of the innermost box in a pallet or stack of boxes, under plastics and carpets in vehicles or machinery, and the deepest points of vehicle engine bays. The key factors that affect the suitability of goods for treatment are free airspace/load capacity and plastic wrapping.

If goods are not presented in a manner that allows for effective treatment, the goods must be adjusted to ensure they are suitable or the treatment cannot be conducted.

**NOTE:** If the treatment is conducted in Australia, treatment providers **must** obtain approval from the department prior to making any adjustments to goods or packaging. Contact [SPP@agriculture.gov.au](mailto:SPP@agriculture.gov.au) for details.

## Free airspace/load capacity

Space must be available in between and around the goods within the treatment enclosure to allow for:

- fumigant or heat to reach all external and internal surfaces of the goods throughout the consignment accessible to BMSB

- the fumigant or heat to be distributed evenly throughout the treatment enclosure
- a fan to be placed within the enclosure (for fumigations) to circulate the fumigant, and the required number of fumigant monitoring tubes and/or temperature sensors that need to be placed in the required locations.

## Fumigation (Sulfuryl Fluoride and Methyl Bromide)

A minimum of three fumigation monitoring tubes must be placed within fumigation enclosures of 30m<sup>3</sup> or more. The monitoring tubes must be placed:

- at the front base of the enclosure on the opposite side to the fumigant supply pipe,
- as close as possible to the very centre of the goods, and
- at the top back of the enclosure on the opposite side to the front base monitoring tube.

It is imperative that monitoring lines are placed at representative points within the enclosure to verify sufficient distribution and concentration levels of the fumigant within the enclosure.

If the fumigation is performed in a temperature controlled environment, there must also be enough space to place temperature sensors as far away as practicable from the heat source.

If treatment providers do not have enough space, the goods must be reconfigured (if permitted – see above note) to allow for the correct placement of monitoring tubes and a fan. If this cannot be done, the fumigation cannot be conducted.

## Heat Treatment

In heat treatment enclosures of 100m<sup>3</sup> or less, a minimum of three temperature sensors must be placed within the goods and two temperature sensors in the free airspace.

The three temperature sensors in the goods must be placed:

- within the goods in the locations that are deemed to be the hardest to heat (i.e. the coldest surface of the goods),
- away from the heat source/s,
- separated from each other.

The two temperature sensors in the free airspace must be placed:

- away from the heat source/s,
- out of the airflow from the heat source
- separated on opposite sides of the enclosure. Additional temperature sensors are required for treatment enclosures above 100m<sup>3</sup>. See HT methodology: [agriculture.gov.au/import/arrival/treatments/treatments-fumigants](http://agriculture.gov.au/import/arrival/treatments/treatments-fumigants)

Treatment providers must have enough space in the enclosure around and above the goods to be able to get in and place the temperature sensors in the required locations and for the air to circulate throughout the enclosure so that all of the goods are able to be heated to the required temperature.

If treatment providers do not have enough space, the goods must be moved around or removed from the enclosure (if permitted – see note on page 1) to allow for the correct placement of temperature sensors to occur. If this cannot be done, the heat treatment cannot be conducted.

## Plastic wrapping

Goods must not be wrapped or covered in a way that stops the heat or fumigant from accessing all surfaces of the goods that are accessible to BMSB. Commercial packing/wrapping is not required to be opened, removed or slashed. However, all shipping packing/wrapping must be opened, removed or slashed (if permitted – see note on page 1) if it will restrict the heat or fumigant from accessing all surfaces of the goods that are accessible to BMSB.

If shipping packaging requires opening, removal or slashing but the packaging cannot be accessed, the treatment cannot be conducted.

Where shipping packing is required to be opened, removed or slashed, all shipping packing within the shipping container must be opened, removed or slashed, not just that which is reachable from the front of the enclosure.

The following definitions are provided to assist treatment providers to determine the plastic wrapping requirements for consignments they intend to treat. It is the responsibility of the treatment provider to ensure that the correct determination is made based on the exposure to risk prior to treatment and the plastic wrapping present on the individual goods being treated.

## Commercial packing

Commercial packing is considered to be any packing/wrapping that is applied as part of the manufacturing process. This includes presentation packing, commercial distribution boxing and hermetic sealing done at the immediate completion of the manufacturing process.

## Shipping packing

Shipping packing is considered to be any packing/wrapping that is applied to provide protection and ensure stability of goods during shipping. This includes pallet wrapping and protective plastics applied after the completion of the manufacturing process and prior to loading.

## Assessing consignment suitability

Treatment providers are responsible for determining if a consignment is suitable for treatment. This determination must consider the combined effect of the multiple requirements outlined above. For example, if goods on pallets are wrapped in plastic shipping wrapping on four sides (i.e. the goods are not covered by plastic at the bottom and top) there may be sufficient access for the fumigant or heat to reach all surfaces of the goods. However, where goods wrapped in this manner are packed tightly and on top of each other, the combined effect of the limited airspace and plastic packaging may restrict the fumigant or heat from reaching all surfaces of the goods.

Treatment providers must be confident that the entire consignment is suitable for treatment. If a container is too full to determine the suitability of the packaging and airspace at the back of the container, an accurate assessment of the entire consignment cannot be conducted. In such cases, importers or manufacturers may provide a declaration that the goods at the back of the container meet the treatment suitability requirements. However treatment providers are ultimately responsible for ensuring each consignment is suitable for treatment. Treatment providers accepting treatment suitability declarations do so at their own risk.

In summary, key factors that must be considered when determining the suitability of a consignment for treatment include:

- free airspace for the effective distribution of the fumigant/ heat to all surfaces of the goods, and for the appropriate placement of concentration sampling tubes and/or temperature monitoring sensors and fans.
- type of plastic packaging around the goods (commercial or shipping)
- whether shipping packaging present restricts fumigant/heat access to goods
- ability to adjust the spacing of goods and packaging prior to treatment if required and if permitted (see note on page 1)
- interaction of free airspace and packaging in restricting fumigant/heat access to the goods
- ability to assess the entire consignment/container of goods

## Treatment Failure

Failures due to poor application of treatments will result in delays, costs, re-treatment, or discharge refusal or reshipment and suspension of treatment providers. Suspension will affect consignments in transit for consignments treated offshore.



**Australia** 1800 900 090 or +61 3 8318 6700 (from outside Australia) **NZ** 0800 00 83 33 (NZ only) or +64 4 830 1574 (from outside NZ)



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