

Malaysian Fumigation Accreditation Scheme (MAFAS)

Regulatory Requirement:

1. Valid license from Ministry of Health
2. Valid Business License
3. Local Authority Permit
4. Pesticide Board Permit to store and sell pesticides
5. Pest Control Operator (PCO) License from Pesticide Board
6. Pesticide Applicator License (PAL/APAL)
7. Company profile
 - Full permanent address
 - Organisational Chart
 - Total number of trained staff
 - Ability to conduct fumigation work
 - Experiences in undertaking plant quarantine treatment
 - List of training program for treatment operators

Technical Requirement:

Possessed the following fumigation equipment that is in good working condition:

- Gas cylinders
- Gas dispenser
- Gassing lines and fittings
- Monitoring lines
- Vaporisers, volatisers or heat exchangers
- LPG or electric heater
- Fans
- Halide detection lamp or electronic leak detector
- Gas monitoring equipment (fumiscope, Reiken Keiki FI-21)
- Kitigawa pump, Draeger pump or Auer pump
- Tarpaulin Sheets
- Repair materials

Malaysian Heat Treatment Accreditation Scheme (MAHTAS)

Regulatory Requirement:

1. Valid Business Registration Certificate
2. Approval from local authorities (eg. City council or District Council)
3. Approval from Fire Brigade and Safety Department
4. Other approval(s) if required (eg NIOSH, Factory and Machinery Dept)
5. Approval from relevant state and federal agencies
(As forestry is a state matter, the relevant Federal Agency in relation to the above matter is to be replaced with the equivalent State Agency)

Technical Requirement:

- Number of heat probes/thermocouples:
 - Minimum of 4 heat probes /thermocouples for a 20 footer chamber. (Volume 33.3m³)
 - Minimum of 6 heat probes /thermocouples for chamber measuring between 20 - 40'x30'x14' (Volume 33.3 - 73 m³)
 - Minimum of 12 heat probes /thermocouples for a chamber exceeding 40'x30'x14' (Volume more than 73.3 m³)
- All thermocouples must be able to measure 0°C and 100°C during simple calibration testing using ice cubes and boiling water.

- Heaters
- Measuring and plastic tape
- Thermometers
- Sand snakes or water snakes
- Weighing scale / machine
- Warning poster / signs
- Perimeter tape (red & white color)
- Torch light and ladder
- First aid kits

- All probes must be inserted tightly and correctly into woods at least 5cm. One probe to be used to measure ambient temperature in the chamber.
- If wood packaging materials for heat treatment are of different dimensions, then probes should be inserted into woods that are of larger size (or thicker wood).
- After taking into consideration calibration error, the Temperature Recording chart should indicate a minimum wood core temperature of 56°C for a duration of 60 minutes. Chart must be shown to auditors during period of initial audit, compliance audit and renewal audit.
- Heat Treatment provider must show proof that heat probes/thermocouples are well maintained (in good working condition) and has been calibrated by calibration agencies approved by SIRIM, during initial and renewal audit.
- Name of operator must be recorded in Temperature Recording Chart.
- Heat treatment of wood packaging materials treatment must not be done simultaneously with other wood materials in the same chamber.
- Wood packaging materials that have been treated must be marked according to ISPM 15. Markings must be legible, permanent and placed in a visible location. Red or orange coloured ink must not be used.
- The owner of wood packaging materials treatment facility must keep record of treated wood packaging materials and sale transaction in a format supplied by Plant Biosecurity & Quarantine Division of Department of Agriculture.
- Storage space that is free of waste woods and not exposed to sun and rain must be made available for

storing treated wood packaging materials. Storage space must be at least 5 meters away from untreated woods.

- Maximum duration for keeping excess treated wood packaging materials in recommended storage space depends on importing countries requirements. For example, one country wants it to be used immediately while others allowed it to be stored for a few months prior to their use.
- Operators, supervisors and owner of heat treatment facilities must be present during auditing.
- Heat treatment provider must ensure that his customers comply strictly with ISPM 15 and other guidelines from Department of Agriculture concerning storage and use of treated wood packaging materials that bear the IPPC Markings.
- Operators and supervisors must have experience in handling kiln drying operations or have attended courses conducted by Malaysian Timber Industry Board.
- Heat treatment providers must clearly show the location of KD/Heat Treatment Chamber that is to be used strictly for heat treatment of WPM only and storage space for keeping excess treated wood prior to usage in relation to other structure/buildings in the factory site plan.

Fumigation companies are also responsible to ensure that:

- The fumigation complies with relevant regulations, safety codes, licensing requisite and related legislation.
- The fumigation complies with the International Standard of Phytosanitary Measure;
- Only accredited fumigators perform quarantine fumigations;
- Goods are suitable for fumigations with methyl bromide prior to the fumigation;

- Fumigations are being performed in a chamber or closed air tight space;
- Fumigators have the required knowledge; and
- They assist and cooperate with Department of Agriculture if there is any inquiries relating to procedures or consignments covered by this Scheme.