

American foulbrood disease – sending beehive material for irradiation

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Introduction

The only approved control methods for American foulbrood (*Paenibacillus larvae*) disease (AFB) of honey bees in New South Wales are burning of all infected bees and hive materials and burying the remains; burial without burning of all infected bees and hive materials; or irradiation of all hive materials. In most circumstances, the most cost-effective measure is irradiation at a commercial irradiation facility such as Steritech at Wetherill Park.

These instructions relate to beehive materials to be irradiated under a written Direction from a Regulatory Officer appointed under the *Apiaries Act 1985*, and to hive materials that beekeepers wish to have irradiated for their own management reasons. Any Direction issued under the provisions of the *Apiaries Act 1985* must be undertaken by the time and date stated. Failure to comply may result in further legal action.

Cost of irradiation

Payment for irradiation is the responsibility of the beekeeper. Contact the Operations Manager at Steritech for current costs of irradiation and to arrange payment.

The irradiation facility is located at:

Steritech Pty Ltd
5 Widemere Road
Wetherill Park NSW 2164
Phone (02) 9609 5566

For Steritech Victoria, phone (03) 9793 5566.

For Steritech Queensland, phone (07) 3293 1566.

Compensation

Compensation may be payable to a beekeeper whose bees, beehives or appliances are destroyed or irradiated due to AFB in circumstances specified in Part 5 of the *Apiaries Act 1985*. Your Apiary Inspector will advise you of the procedures to claim compensation under the provisions of the *Apiaries Act*. If a beekeeper destroys or irradiates material without first having it inspected by an Apiary Inspector, and receiving a written Direction from the Inspector, then compensation is not payable.

Compensation may not be available in the future as changes to the future use of levy monies collected are currently being determined.

The following instructions must be strictly followed.

Preparation of material

- Isolate the hives containing the bees to be irradiated. Put them together, away from other hives.
- Cage the queen to prevent further brood production. Caging the queen is preferred to killing the queen, as the presence of the queen will keep the hive bees together as a unit and reduce drifting.
- Extract honey from all frames, keeping the honey drums separate from other supplies. Clearly mark the drums 'Honey contains AFB'. Honey extracted from infected hives may be sold to honey packers or direct to the cooking or baking industries. If you are selling to honey packers, advise them that AFB is present. NSW packers will accept AFB-affected honey and direct this honey to the baking industries.



- Advise the Apiary Inspector of your arrangements to dispose of the AFB-affected honey. Drums and containers that hold the AFB-contaminated honey must be kept sealed and the outside surfaces thoroughly cleaned to prevent robbing by bees.
- Thoroughly clean the extraction plant and all other appliances used for extracting or processing. Use a 1 per cent solution of caustic soda in warm water.
- You must arrange your own transport and lodge the appropriate documentation. Discuss this with the Steritech site manager.
- Payment must be made before, or at the time of, pick up.
- Boxes left for extended periods after processing will be charged a storage fee and/or may be destroyed.

Note. If any of the above procedures are not followed, Steritech may refuse receipt or dispatch of goods.

Any queries should be directed to the Steritech Operations Supervisor or the Operations Manager.

By day 24 after isolating the queen, no brood will be present, as the worker and drone life cycles are 21 and 24 days respectively. Contact an Apiary Inspector to discuss appropriate methods for killing the bees. Remove the dead bees and bury them, together with any hive material that is unsound or that was directed by the Apiary Inspector to be destroyed.

Control any wax moth infestations in stored bee combs before submitting hive materials for irradiation. If phosphine gas is used (available under a number of trade names), remove the container holding the phosphine residue from each unit before sending the unit for irradiation. Cool rooms may be used to control wax moth.

Arrangements with Steritech

Contact the Operations Manager to arrange delivery date and time. The manager will need to be advised of the number of units to be irradiated and the means of transport to the facility.

The manager will also be able to tell you the date and time when the irradiated material will be ready for pick up. You may expect the delivery and pick-up times to be between 8.30 am and 3.30 pm, Monday to Friday, but check with the manager on each occasion.

Preparing the hives

The following procedures must be followed before delivery of bee boxes for irradiation at Steritech.

- Boxes must be bee proof and spider free.
- Boxes must be honey free.
- Boxes must be thoroughly cleaned on the outside (preferably with a high-pressure hose).
- Each box (single) must be bagged or shrink-wrapped then stacked into doubles or triples with the lid and base.
- Each unit must be labelled with the name of the beekeeper for easy identification.
- Each double/triple unit then must be double-strapped using metal Emlocks with a clip at the bottom of the unit under the base.
- Each unit (double/triple) must be double-bagged or preferably shrink-wrapped, sealing the entire unit. Seal the plastic bags with tape.
- A weight limit of 25 kg per unit is imposed by Steritech. Units weighing more than 25 kg will not be accepted and must be reduced in weight e.g. reduce a stack of 3 boxes to 2 boxes.

Transport

Transport and all costs associated with it are the responsibility of the beekeeper. These costs are not compensatable.

Units must be transported in a bee-proof vehicle or container. The boot of a car, a sealed panel van, pantehnicon, or a fully sealed trailer, or a container comprising a bee-proof box made from masonite or ply, may be used.

If none of the above coverings is available to you or your carrier the units must be enclosed (underneath, sides, ends and top) with a double layer of tarpaulin completely enveloping the load. The tarpaulin must be left with the units for irradiation.

A notice, as indicated below, must be affixed to the dashboard of the vehicle.

**THIS VEHICLE IS TRANSPORTING DISEASED
BEE MATERIAL.**

**IN THE EVENT OF AN ACCIDENT, CONTACT
NSW DPI ON 1800 675 888**

Points to remember

All beehives must be free from bees, honey and spiders. Each single box must be bagged or shrink-wrapped and then stacked into doubles or triples with the lid and base. Units must not weigh more than 25 kg.

Steritech may not accept material for irradiation if it is not presented in the manner set out above.

All treated material must be removed from Steritech's premises within 14 days following treatment; otherwise storage fees of \$5 per unit may apply. Steritech will advise you when treatment has been completed.

The beekeeper must pay for all transport and irradiation costs. Reimbursement of irradiation costs (only) may be subsequently claimed, although payment depends on compliance with the Apiaries Act.

Note. The information in this Primefact was correct at the time of publication. However, charges and policies of Steritech are not set by NSW DPI, and beekeepers must make their own enquiries before entering into any arrangement for irradiation services with Steritech or any other supplier of this service.

Further information

For a complete list of NSW DPI Primefacts on the web, go to www.dpi.nsw.gov.au/primefacts

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (August 2006). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of New South Wales Department of Primary Industries or the user's independent adviser.