

# Biosecurity (Polyphagous Shot-hole Borer) Amendment Regulation 2023

Explanatory Notes for SL 2023 No. 118

made under the

*Biosecurity Act 2014*

## General Outline

### Short title

*Biosecurity (Polyphagous Shot-hole Borer) Amendment Regulation 2023*

### Authorising law

Sections 47, 128, 129 and 503 of the *Biosecurity Act 2014*

### Policy objectives and the reasons for them

The objectives of the amendment regulation are to:

1. Establish a biosecurity zone to deal with risks posed by polyphagous shot-hole borer (*Euwallacea fornicatus* or PSHB))
2. Ensure the biosecurity zone deals with matters in a way that minimises the risk of incursion from PSHB, by preserving risk prevention and management procedures in the current movement control order (MCO).

PSHB is a high-risk quarantine pest that can be introduced with unrestricted trade practices, has a high potential for establishment and spread and has a demonstrated ability to cause serious economic and ecological damage. It attacks a very wide range of woody plants and is considered a pest of agricultural, environmental, and urban amenity trees. To date, more than 400 host species in 75 families have been reported, and the host range continues to expand, especially when PSHB is introduced to new locations.

In Australia, PSHB is currently restricted to Western Australia; with two previous suspect detections of PSHB in Queensland (2010 and 2017) subsequently determined to be tea shot-hole borer (*E. perbrevis*). Establishment of this pest in Queensland is highly likely to have a significant impact on urban amenity trees, native vegetation, plantation forestry and fruit and nut tree crop industries.

In response to the detection of PSHB in WA, the Chief Executive made an MCO. The MCO applies to the whole of Queensland and prescribes certain requirements to minimise the risk of PSHB from entering the state.

The MCO was made on 1 November 2022, remade on 1 March 2023, and again on 1 June 2023. It expires on 1 September 2023, unless earlier revoked. Under the Biosecurity Act, MCOs may be directed at managing, reducing, or eradicating controlled biosecurity matter over a limited period rather than over an extended or indefinite period. For these reasons, a permanent biosecurity zone regulatory provision to prevent the introduction of PSHB is required to be in force by the time the MCO expires.

## **Achievement of policy objectives**

The Amendment Regulation achieves its first objective by establishing biosecurity zone regulatory provisions for PSHB as a new Chapter 5, Part 12B of the *Biosecurity Regulation 2016* (Biosecurity Regulation).

The biosecurity zone regulatory provisions reflect the temporary biosecurity measures contained in the MCO and establishes the whole of Queensland as a biosecurity zone. The biosecurity zone requires persons to:

- notify an inspector about the presence of PSHB; and
- not move PSHB carriers into the biosecurity zone other than in particular circumstances.

## **Consistency with policy objectives of authorising law**

The Amendment Regulation is consistent with the objectives of the Biosecurity Act, which are generally to minimise biosecurity risks and to facilitate a response to biosecurity risks in a timely and effective way.

## **Inconsistency with policy objectives of other legislation**

The amendment regulation is not inconsistent with the policy objectives of other legislation.

## **Alternative ways of achieving policy objectives**

There are no feasible alternative ways to achieve the objectives other than through amendments to the Biosecurity Regulation.

While an MCO is currently established to minimise the risk of PSHB entering Queensland, MCOs are legislative tools that are intended for use only over a limited period, rather than an extended period of time. Therefore, a permanent regulation response is required to maintain necessary risk management regulations, as continued management under an MCO is inconsistent with the purpose of MCOs under the Act.

Providing no government intervention would greatly increase the risk of PSHB incursion in Queensland by allowing unregulated movement of carriers into and around Queensland after the current MCO has expired. This poses an unacceptable level of economic and ecological risk to Queensland as establishment of this pest in Queensland is highly likely to have a significant impact on urban amenity trees, native vegetation, plantation forestry and fruit and nut tree crop industries.

## Benefits and costs of implementation

The benefit of maintaining movement controls for PSHB is to avoid the challenges associated with and potential cost of management and eradication should it enter Queensland.

A recently published paper '*Economic impact of polyphagous shot hole borer *Euwallacea fornicatus* Coleoptera: Curculionidae: Scolytinae) in Western Australia*' (Cook and Broughton 2023) details the economic impact of PSHB in Western Australia. Within this paper:

- A bioeconomic model was used to simulate the insect's spread and economic impact based on additional urban and commercial tree management costs. Two scenarios were examined, one in which an eradication policy response was initiated, and one in which it was not.
- With no eradication response, results indicated that median costs would reach \$6.8 million per annum in 30 years, with 98 per cent of these costs relating to management in urban forests.
- It concluded that the eradication funding currently proposed, involving an investment of \$45 million over 3 years, will not generate sufficient benefits to offset costs in the short-term, but may produce net benefits in the longer term.

This does not include consideration of environmental economic impacts. Review of this shortfall in information is underway and will provide further information required to complete a more comprehensive cost benefit analysis for Australia.

Commercially produced tree hosts at risk from PSHB include avocados and mangoes. Queensland continues to produce the majority of Australian avocados and mangoes, with 48 per cent of production with a gross value of \$176 million for avocados, and 47 per cent of production with a gross value of \$103.5 million for mangoes (Australian Horticulture Statistics Handbook 2021/22).

PSHB has been reported to form symbiotic relationships with several different fungal species in natural situations (i.e. countries of native distribution). However, in countries where it is an invasive pest of commercial crops and forests, PSHB is usually associated with *Fusarium* species, in particular *F. euwallacea*. Irrespective of the particular species of symbiont associated with PSHB, the adults cultivate fungi inside the tree as a food source for themselves and their progeny (larvae). The fungus disrupts water and nutrient movement within the vascular system of susceptible trees, causing dieback of branches or whole trees. Specifically, leaves and branches wilt and die with symptoms often appearing in the upper canopy first. In susceptible trees, death of the whole tree is common.

PSHB is a serious risk to plant industries, urban amenity, and the environment in Queensland; and if movement control and prevention measures fail and PSHB enters Queensland, eradicating PSHB once it has entered Queensland will be costly and challenging.

The Queensland Government will incur an additional cost in the implementation and support of the biosecurity zone. Administrative costs include the development of legislation and compliance monitoring and enforcement activities to verify PSHB carrier(s) from Western Australia is complying with the risk minimisation conditions.

Biosecurity Queensland, Department of Agriculture and Fisheries, is also undertaking research and surveillance in Queensland that directly targets the hosts of this pest. These costs will be met from within existing budget allocations.

## Consistency with fundamental legislative principles

**Legislation has sufficient regard to the institution of Parliament by allowing the subdelegation of a power delegated by an Act—the *Legislative Standards Act 1992*, s 4(5)(e)**

### Section 94EH – Restrictions on moving shot-hole borer carriers

Section 94EH of the subordinate legislation potentially breaches the principle of subdelegation of a power where subordinate legislation should allow the subdelegation of a power delegated by an Act only in appropriate cases and to appropriate persons and if authorised by an Act. Part of the rationale for this is to ensure sufficient parliamentary scrutiny of a delegated legislative power, as per s4(4)(b) of the *Legislative Standards Act 1992*.

This potential issue arises as some elements of the amendment regulation will be set out in the biosecurity manual rather than in the Biosecurity Regulation.

The Biosecurity Manual has previously been incorporated into the legislation by reference, with appropriate checks in place to ensure that the items included in the Biosecurity Manual are not inconsistent with legislation, which has undergone the appropriate parliamentary scrutiny.

Additionally, the elements subdelegated include risk minimisation procedures which were implemented as part of the MCO, as well as the list of over 570 plant carriers, which experiences rapid changes over time, with carrier plants being added on an ongoing basis as new evidence emerges. The volume, technical content, and rapid evolution of the list make it impractical to manage through the Biosecurity Regulation.

The alternative options — either limiting the carrier list to facilitate its inclusion in the amendment regulation itself or defining 'carrier' more broadly in the amendment regulation so that a list becomes redundant — both present significant issues. The former option increases difficulty in updating the list on an ongoing basis and risks the introduction of PSHB into Queensland via an unregulated carrier, while the latter would result in unnecessary regulation of non-carrier plants alongside legitimate host plants.

The proposed approach to subdelegation in this instance is appropriately justified as the least restrictive, and most reasonable and justifiable approach to identifying a list of carrier plants. Possible conflict with the fundamental legislative principles requiring reasonable parliamentary scrutiny is limited as the Biosecurity Manual is already heavily relied upon to support the Biosecurity Regulation and does not conflict with existing legislation.

## Consultation

Greenlife Industry Australia (GIA), the Nursery and Garden Industry Queensland (NGIQ), and the Subcommittee on Market Access, Risk and Trade (SMART) were consulted about the development of the MCO for PSHB and its carriers and have been consulted about moving the restrictions under the MCO to a regulation amendment. GIA and SMART are broadly supportive of the policy objectives, with ongoing technical discussion about risk minimisation measures. NGIQ are participating in the discussions and have not raised any concerns.

The Department of Agriculture and Fisheries consulted the Office of Best Practice Regulation (OBPR) on whether the amendment is excluded from further analysis under the *Queensland Government Guide to Better Regulation*. The OBPR assessed that the amendment is excluded from further analysis on the basis that the proposal will not add to the burden of regulation and are unlikely to result in significant adverse impacts.

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