



## Virginia Department of Planning and Budget **Economic Impact Analysis**

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**2 VAC 5-325 Regulations Governing Pine Shoot Beetle**  
**Department of Agriculture and Consumer Services**  
**Town Hall Action/Stage: 5676 / 9191**  
May 11, 2021

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### **Summary of the Proposed Amendments to Regulation**

The Board of Agriculture and Consumer Services (Board) proposes to repeal regulations that restrict the movement of materials that host the pine shoot beetle.

### **Background**

This action follows the repeal of similar federal regulations pertaining to the pine shoot beetle,<sup>1</sup> and the Board's findings that the pine shoot beetle has not caused significant economic impact to affected industries, that the pest has not spread throughout the Commonwealth, and that it can be successfully managed through the implementation of best management practices.

The pine shoot beetle (*Tomicus piniperda*) is a pest that affects pines in Africa, Asia, and Europe by colonizing fresh timber and dying pine trees in early spring. Larvae feed within the galleries under the bark and emerge as adults from the shoots. They then move to the base of the tree to reproduce. This species of bark beetle is not considered fatal for the tree, but it damages the growth form, reducing the economic value of the timber by reducing growth rates and stem straightness.

The first known occurrence of the pine shoot beetle in North America was in 1992 at a Christmas tree farm in Ohio, from where it has spread to 11 states in the United States and to Ontario and Quebec in Canada. Based on an initial finding of potentially high economic losses, the United States Department of Agriculture (USDA) implemented in 1992 a program regulating

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<sup>1</sup> <https://www.federalregister.gov/documents/2020/10/01/2020-21800/deregulation-of-pine-shoot-beetle>

the movement of pine logs and bark, nursery stock, and Christmas trees from infested to uninfested areas.

In 2003, the Board promulgated *Regulations Governing Pine Shoot Beetle* after the pine shoot beetle was found in a Christmas tree planting in Clarke County. The regulation established a quarantine, which was subsequently expanded to Loudoun County in 2010 after the pine shoot beetle was detected in that county as well. USDA also expanded the federal pine shoot beetle regulation to include Loudoun County at the same time, thereby ensuring that the federal and state pine shoot beetle regulations were aligned.

Consistent with the federal regulation's focus on prevention of spread, containment of infestation, treatment, and eradication, Virginia's regulation primarily restricts the movement of articles that are at risk for transporting the pine shoot beetle out of regulated localities. The federal regulations have been repealed effective November 2, 2020 primarily due to the finding that the beetle has not caused significant economic damage as originally anticipated.

Similarly, the Board has determined that pine shoot beetle has not caused significant economic impact to affected industries, that the pest has not spread throughout the Commonwealth, and that the pine shoot beetle can be successfully managed without limiting the movement of goods. As a result, the Board proposes to repeal this regulation.

### **Estimated Benefits and Costs**

Currently, two Christmas tree growers (one in Loudoun County and one in Clark County) are subject to this regulation, although as many as six businesses have been regulated at one time since 2003. The regulation is enforced by requiring the businesses that are at risk of pine shoot beetle presence and spread to enter into a compliance agreement with the Virginia Department of Agriculture and Consumer Services (VDACS). Through the compliance agreement, the regulants are required to limit shipment of regulated articles out of the regulated area unless all applicable components of the compliance management program are met.

Those requirements include 1) sanitation (removal and destruction of brood material such as dead and dying pine trees, recently cut or killed trees, tree tops, branches and other pine slash, and stump), 2) visual monitoring (random scouting of infested shoots and tips), 3) deployment of trap and sentinel logs by January and then destruction of logs in April (to trap and eradicate adult beetles searching for suitable brood material), 4) chemical control (application of pesticides), 5)

record keeping (pertinent records include the number of trees scouted, scouting dates, sanitation treatments conducted, trap log activities and insecticide usage).

According to VDACS, the requirements in the compliance agreements are no more than best management practices (to control the movement of the beetle, to detect and eradicate the beetle from their stocks) and do not impose significant costs on regulants. There are no regulatory fees for compliance agreements, permits or certificates, or surveys that VDACS conducts.

In summary, the compliance costs implicated by the regulation include travel or postage costs, time, and effort to sign a compliance agreement with VDACS, inspection of shipments bound for transport out of the locality, visual inspection of fields where the trees are grown, application of pesticides to treat infestations when discovered, and recordkeeping expenses. Similarly, the agency costs are comprised of staff time to draft and enter into compliance agreements and a small fraction of two pest inspectors' time and travel devoted to survey the beetle presence under this regulation.

According to VDACS, the regulants would likely continue their best management practices for the beetle even if they may no longer be required to do so under this regulation. Such behavior would be rational if regulants are interested in minimizing the risk of economic losses that may stem from the pine shoot beetle. Thus, while the repeal of this regulation is expected to eliminate administrative costs associated with signing the agreement with VDACS and the record keeping expenses, it is not expected to create any other significant economic impact on entities that are regulated.

Although without the regulation there would be no barrier to prevent the exportation of infested host materials out of the locality, VDACS reports that last time the beetle was found in Virginia was in 2010; according to the agency, this indicates that the beetle is no longer present in the Commonwealth.

### **Businesses and Other Entities Affected**

The repeal of this regulation would primarily affect businesses that move pine trees, pine logs, and other regulated articles out of the quarantined area. Currently, two Christmas tree

growers (one each, in Loudoun and Clarke Counties) would be affected. The repeal of this regulation is not anticipated to have an adverse impact<sup>2</sup> on affected entities.

### **Small Businesses<sup>3</sup> Affected:**

The two entities regulated under this regulation are believed to be small businesses, but the proposed repeal of this regulation is not expected to adversely or significantly affect them.

### **Localities<sup>4</sup> Affected<sup>5</sup>**

This regulation specifically applies to Loudoun and Clarke Counties, the localities where the pine shoot beetle is present. However, the proposed action does not introduce costs for the two localities.

### **Projected Impact on Employment**

The proposed action does not appear to affect total employment.

### **Effects on the Use and Value of Private Property**

The proposed action would remove restrictions on the movement of materials that host the pine shoot beetle. However, the repeal of such restrictions is not anticipated to have a significant impact on the use and value of private property or on real estate development costs.

### **Legal Mandates**

**General:** The Department of Planning and Budget has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia (Code) and Executive Order 14 (as amended, July 16, 2018). Code § 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the report should include but not be limited to: (1) the projected number of businesses or other entities to whom the proposed regulatory action would apply, (2) the identity of any localities and types of businesses or other entities particularly affected, (3) the projected number of persons and employment positions to be affected, (4) the projected costs to affected businesses or entities to implement or comply with the regulation, and (5) the impact on the use and value of private property.

**Adverse impacts:** Pursuant to Code § 2.2-4007.04(D): In the event this economic impact analysis reveals that the proposed regulation would have an adverse economic impact on businesses or would impose a significant adverse economic impact on a locality, business, or entity particularly affected, the Department of Planning and Budget shall advise the Joint Commission on Administrative Rules, the House Committee on Appropriations, and the Senate Committee on Finance within the 45-day period.

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<sup>2</sup> Adverse impact is indicated if there is any increase in net cost or reduction in net revenue for any entity, even if the benefits exceed the costs for all entities combined.

<sup>3</sup> Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as “a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.”

<sup>4</sup> “Locality” can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

<sup>5</sup> § 2.2-4007.04 defines “particularly affected” as bearing disproportionate material impact.

If the proposed regulatory action may have an adverse effect on small businesses, Code § 2.2-4007.04 requires that such economic impact analyses include: (1) an identification and estimate of the number of small businesses subject to the proposed regulation, (2) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents, (3) a statement of the probable effect of the proposed regulation on affected small businesses, and (4) a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation. Additionally, pursuant to Code § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules shall be notified.