

chips may be imported. Under the current regulations, wood chips that are not derived from tropical trees and that are from any place except places in Asia that are east of 60 degrees east longitude and north of the Tropic of Cancer may be imported into the United States if, among other things, they are, in accordance with the regulations in § 319.40–7: (1) Fumigated with methyl bromide; (2) heat treated; or (3) heat treated with moisture reduction. Wood chips that are derived from live, healthy, tropical species of plantation-grown trees grown in tropical areas, which would include wood chips of tropical species of *Eucalyptus* from South America, may currently be imported into the United States without undergoing the treatments listed, but they must be consigned to a facility operating under a compliance agreement.

Based on the evidence in the pest risk assessment discussed previously, which indicated that visual inspection alone might not provide the appropriate level of protection against several pests of tropical species of *Eucalyptus*, we are proposing more restrictive entry requirements for wood chips of tropical species of *Eucalyptus* from South America. We are proposing to amend the regulations to make wood chips of tropical species of *Eucalyptus* from South America subject to the same treatment requirements that apply to wood chips that are not derived from tropical trees, *i.e.*, fumigation with methyl bromide, heat treatment, or heat treatment with moisture reduction in accordance with the regulations in § 319.40–7 prior to importation. (The surface pesticide treatment discussed in the next paragraph as an alternative treatment for *Eucalyptus* wood chips from South America would also be available for wood chips of tropical species of *Eucalyptus*). This proposed requirement that wood chips of tropical species of *Eucalyptus* be subject to the same treatment requirements that apply to wood chips that are not derived from tropical trees is necessary to ensure protection against the introduction and dissemination of plant pests through the importation of wood chips of tropical species of *Eucalyptus* from South America. As discussed in the previous section, the proposed treatments have been proven effective against the pests that were identified with a high risk potential in the risk assessment.

Surface Pesticide Treatment

APHIS has received several requests from the wood pulp industry for an alternative treatment for *Eucalyptus* wood chips, which are in demand

because they produce high quality pulp. While heating and fumigation treatments are appropriate for solid wood products, they are less useful for wood chips. Heating of wood chips is time consuming, and fumigation of wood chips in ship holds is difficult. Surface pesticide treatments, however, can be effectively applied to large shipments of wood chips. Treatment with topical fungicides and insecticides has several advantages over other mitigation measures for the treatment of wood chips: The spray can coat nearly the entire surface of the chip, the treatment solution can be easily adjusted to improve chip coating or biological efficacy, and the total amount of treatment per dry ton of chips can be monitored readily. The quality of the treatment can be monitored by removing samples of chips for chemical analysis. This option is not possible with heat treatment or fumigation since no residual evidence of the treatment is present with these measures.⁸ Based on the requests from the wood pulp industry and on the evidence in the pest risk assessment prepared by the U.S. Forest Service, we are proposing an alternative treatment for the treatment of *Eucalyptus* wood chips prior to importation.

In response to similar requests from the wood pulp industry for an alternative treatment for Monterey pine wood chips from Chile, APHIS amended the regulations in April 2000 to allow the importation of *Pinus radiata* (also known as Monterey pine) wood chips from Chile if the surfaces of the wood chips are treated with a specified pesticide mixture.

We are proposing to amend § 319.40–7(e), concerning surface pesticide treatments, to allow the same treatment used on *Pinus radiata* wood chips from Chile to be used on wood chips of species of *Eucalyptus*. This surface pesticide treatment must be a mixture of a fungicide containing 64.8 percent of the active ingredient didecyl dimethyl ammonium chloride and 7.6 percent of the active ingredient 3-iodo-2-propynyl butylcarbamate and an insecticide containing 44.9 percent of the active ingredient chlorpyrifos phosphorothioate. The wood chips would have to be sprayed with the pesticide so that all the chips are exposed to the chemical on all sides. During the entire interval between treatment and export, the wood chips would have to be stored, handled, or safeguarded in a manner that prevents

any infestation of the wood chips by plant pests.

This surface pesticide treatment has proven effective for treatment of *Pinus radiata* wood chips against mold and sapstain, including *Alternaria alternata*, *Ophiostoma piceae*, *Phialophora* spp., *Aspergillus niger*, and *Trichoderma* spp.⁹ Observations of ship holds containing *Pinus radiata* wood chips entering the United States in Washington indicate little evidence of insect activity.¹⁰ The effectiveness of the insecticide in the chip treatment, the minimal amount of bark, and the fragmentation of the wood probably all contribute to this result. Allowing the use of this surface pesticide treatment on wood chips of species of *Eucalyptus* from South America would provide another treatment alternative to persons interested in importing such wood chips while continuing to protect against the introduction of plant pests.

To help ensure that the *Pinus radiata* wood chips from Chile are free from pests, several additional requirements are included in the regulations, which are found in § 319.40–6(c)(1). Under this proposed rule, these requirements would also apply to *Eucalyptus* wood chips that had undergone surface pesticide treatment. We would require that the wood chips be treated with a surface pesticide treatment in accordance with § 319.40–7(e) within 24 hours after the log was chipped and be retreated if more than 30 days elapsed between the date of the first treatment and the date of export to the United States.

We would also require that the wood chips be accompanied by a certificate stating that the wood chips were derived from logs from live, healthy, plantation-grown trees that were apparently free of plant pests, plant pest damage, and decay organisms, and that the logs were debarked in accordance with § 319.40–7(b) before being chipped. We would require that the wood chips be from plantation-grown trees because the pest risk in a managed forest area is lower than in an unmanaged forest.

We would also require that the certificate state that no more than 45 days elapsed from the time the trees used to make the chips were felled to the time the wood chips were exported.

⁹Morell, J.J. and C.M. Freitag, and A. Silva. 1998. Protection of freshly cut radiata pine chips from fungal attack. Forest Prod. Journal 48(2): 57–59.

¹⁰Russell, K. 1996. How does Washington deal with inquiries and procedures for importing unmanufactured wood products? Proc. Importing Wood Products: Pest Risk to Domestic Industries. Oregon State University, Corvallis, OR, pp. 138–140.

⁸Morell, J.J. and C.M. Freitag, and A. Silva. 1998. Protection of freshly cut radiata pine chips from fungal attack. Forest Prod. Journal 48(2): 57–59.