TDA-Approved Mitigation and Treatment Measures for the Movement of EAB Regulated Articles from Quarantined Areas

Regulated Article	Mitigation and Treatment Measures					
Firewood of all hardwood species	 Remove bark and an additional ½ inch of wood¹ or Kiln sterilization treatment (Table 1) or Heat treatment at 140°F for 60 minutes or Fumigation treatment (Table 2) or Apply another TDA approved method². 					
Chips and Mulch of all hardwood species	 Chip or mulch to less than one inch in at least two dimensions or Follow an TDA approved mulching or composting protocol or Apply another TDA approved method². 					
Nursery Stock of <i>Fraxinus</i> spp.	No treatment available. No compliance agreements. No certification. This article is not being moved at this time.					
Green lumber of <i>Fraxinus</i> spp.	 Remove bark and an additional ½ inch of wood¹ or Kiln sterilization treatment (Table 1) or Fumigation treatment (Table 2) or Apply another TDA approved method². 					
Logs of <i>Fraxinus</i> spp.	 Remove bark and an additional ½ inch of wood¹ or Kiln sterilization treatment for logs <3" dia.(Table 1) or Heat treatment at 140°F for 60 minutes or Fumigation treatment (Table 2) or Apply another TDA approved method². 					
Other material including wood waste, living, dead, cut or falling including stumps, roots, branches of <i>Fraxinus</i> spp.	 Chip or mulch to less than one inch in at least two dimensions or Apply another TDA approved method². 					
Wood Packing Material containing regulated green lumber, including but not limited to, dunnage, crating, pallets, packing blocks, drums, cases, and skids.	 ISPM accredited treatments or Treatment/mitigations for green lumber of <i>Fraxinus</i> spp. as listed above or Apply another TDA approved method². 					

¹ The bark and wood removed will be regulated separately. If intended for movement outside of the quarantined area, the removed bark and wood must be treated as described for chips and mulch.

² Consult the State Plant Regulatory Official at (512)-463-7660 for other acceptable treatment methods.

Detailed Treatment Specifications

Table 1. Kiln Sterilization Treatment

Dry bulb temperature (°F)	Wet bulb depression (°F)	Relative humidity (%)	Moisture content (%)	Thickness of lumber (inches)	Treatment Time After Kiln Reaches Conditions (hours)
140	7	82	13.8	1	3
				2	5
				3	7
130	16	60	9.4	1	10
				2	12
				3	14
125	15	61	9.7	1	46
				2	48
				3	50

Table 2. Fumigation Treatment using Methyl Bromide at NAP tarpaulin or chamber

Temperature	Dosage Rate	Minimum Concentration Readings (ounces) at:					
(°F)	(lb/1,000 ft ³)	0.5hr ¹	2 hrs²	4 hrs ³	16 hrs³		
>70	3	36	30	27	25		
40-69	5	60	51	46	42		

¹ If the fumigation is conducted in a closed-door container, take the first reading at 1 hour instead of 0.5 hours.

 $^{^2}$ If the fumigation is conducted in a closed-door container, take the second reading at 2.5 hours instead of 2 hours.

³ If the 4- and 16-hour readings would occur outside of normal working hours, then the fumigation may be extended to a total of 24 hours, instead of 16 hours. In that case, the 24-hr minimum concentration reading would be 25 (for the initial 3-lb dosage), or 42 (for the initial 5-lb dosage).