

FIREWOOD
COMPLIANCE AGREEMENT STIPULATIONS

- A. The Pennsylvania Department of Agriculture (hereafter referred to as PDA) may issue or approve certificates, preprinted labels or rubber stamps, as appropriate, attesting to proof of quarantine compliance. Such certificates, labels or stamps remain the property of PDA and are not to be reproduced without written permission. Proof of quarantine compliance is to accompany each shipment.
- B. Regulated articles entering the regulated area from non-regulated areas and destined to non-regulated areas must be subjected to appropriate inspection and/or approved mitigation / treatment protocols as applicable prior to shipment AND be accompanied by certificates of quarantine compliance.
- C. Records:
 - 1. Shipment records are to detail the kind and quantity of regulated commodity shipped, shipper name, date of shipment and destination.
 - 2. Any treatment records shall be kept in accordance with applicable state / federal requirements.
 - 3. All records are to be maintained for a minimum of two years with copies provided to the PDA upon request.
- D. Violation of these stipulations is cause for suspension or revocation of this compliance agreement as well as civil or criminal penalty.

The Establishment referenced here will ship regulated Firewood intrastate from a quarantined area **ONLY** after the following treatments are completed at the establishment's expense:

The manufacturing/treatment process must take place within the quarantined area. Regulated articles that have undergone an approved treatment may be shipped throughout the year.

This establishment will ensure that each shipment of treated regulated material moved intrastate is accompanied by a completed State issued Certificate and will maintain copies of the Certificates at their premises. The establishment will ensure that Certificates are safeguarded from misuse, unauthorized use, and loss. No Certificates are to be duplicated without the approval of the Pennsylvania Department of Agriculture. All Certificates must be accounted for, including voids.

The Pennsylvania Department of Agriculture retains the right to conduct inspections of regulated articles, monitor treatment procedures, and examine shipment, treatment, and certificate records at any time during normal business hours. All records must be maintained for at least 24 months. All requests for documents are to be filled within 48 hours of the date of initial request. Inspector copies are to be forwarded to the issuing office once per month.

If the Establishment fails to comply with the provisions of this Compliance Agreement and/or the Thousand Cankers Disease Quarantine regulations, this Compliance Agreement will be canceled. In addition, violations of state regulations, including any alteration, forgery or unauthorized use of state forms, are subject to criminal prosecution carrying up to 90 days imprisonment and a fine of up to \$300 with respect to each violation. In addition, a person who violates this Compliance Agreement may be assessed a civil penalty of up to \$20,000 with respect to each violation.

This establishment will ship regulated black walnut logs, lumber, stumps, branches, and chips interstate from a quarantined area **ONLY** after **ONE** of the following treatments is completed at the establishment's expense:

1. Remove the bark and an additional ½ inch of wood. The bark and wood removed will be regulated separately.
2. Follow a kiln drying treatment. The maximum thickness of allowable wood is three inches. See attachment A- 1
3. Fumigate according to a treatment schedule. See attachment A- 1
4. Heat Treatment [*Juglans* sp.(Black walnut and other) logs]. See attachment A-1.

Attachment A-1 USDATreatment Requirements Kiln Drying Treatment Schedule

Treatment: T404-b-4 Kiln Sterilization

Dry Bulb temperatures	Wet Bulb depression	Relative humidity	Moisture content	Thickness of lumber	Exposure time
140 ⁰ F	7 ⁰ F	82%	13.8%	1 inch	3 hrs
				2 inches	5 hrs
				3 inches	7 hrs
130 ⁰ F	16 ⁰ F	60%	9.4%	1 inch	10 hrs
				2 inches	12 hrs
				3 inches	14 hrs
125 ⁰ F	15 ⁰ F	61%	9.7%	1 inch	46 hrs
				2 inches	48 hrs
				3 inches	50 hrs

1. After kiln drying, the wood will be checked with a moisture meter to verify the wood is at or below the appropriate moisture content listed above. Two readings will be taken per stack of wood: one near the top of the stack and one near the bottom of the stack. These reading will be recorded in a computer database along with the date and time. This database information will be supplied to USDA, APHIS, PPQ on a monthly basis.

If the wood does not meet moisture content guidelines, it will **NOT** be in compliance unless it undergoes additional kiln drying and can then demonstrate that the moisture requirement has been met.

Fumigation Treatment Schedule

Treatment: T404-b-1-1 MB at NAP-tarpaulin or chamber

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

1. The fumigation must be performed by a licensed fumigator.
2. The licensed fumigator must have a fumigator compliance agreement with United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine.
3. Review the treatment schedule for specific fumigation guidelines.

Heat Treatment Schedule

(Juglans sp. logs and Hardwood Firewood)

2. Heat Treatment Schedule (Juglans sp. Logs and Hardwood Firewood) revised 4-22-2009

Treatment: T314-a Heat treatment

1. Heat treatment procedures may employ steam, hot water, kilns, or any other method that raises the temperature of the **center** of the wood to at least 160°F (71.1°C) and maintains the center temperature for at least 75 minutes.
2. Facilities, temperature monitors and temperature sensors will be approved by CPHST (Center for Plant Health and Science Technology) prior to a compliance agreement being initiated. Compliance agreements must contain a diagram of the treatment facility to include at a minimum: dimensions, capacity, circulation fans, heat input location, and door locations.
3. The temperature monitoring equipment (thermocouples, temperature data loggers etc) must be accurate to within +/- 0.5 °C (0.9 °F) at the treatment temperature, capable of collecting temperature data at least once every five (5) minutes and recording or storing data for 30 days. The temperature monitoring equipment must also be calibrated (by a source that can provide accreditation such as NIST) prior to facility certification tests and a minimum of once an annually thereafter. In addition, if a permanent temperature recording system is used, the system must be recalibrated when any part or portion of the system is repaired or replaced.
4. Temperature monitoring equipment must be able to provide a record of the treatment that identifies each sensor and indicates time and temperature.
5. Internal wood temperatures shall be obtained and verified by sensors located in the larger pieces of firewood at representative locations within the stack. The number of temperature sensing elements required per load will vary with the size of the load. The minimum requirement is four (4) sensors – one (1) for measuring air temperature and three (3) for measuring internal wood

- temperature. For loads greater than 5,000 ft³ (142 m³) of wood, a minimum of one additional sensor for measuring internal wood temperature must be provided for each additional 2,000 ft³. For example, a load of 9,000 ft³ would require a total of six (6) sensors (one ambient air temperature sensor and five [3 + 2 additional sensors]). At least one sensor shall be placed in a large firewood piece in a portion of the load furthest away from initial heat circulation. Sensors will be placed in the wood in pre-drilled holes to measure core wood temperature. Probes are to be sealed into each hole with putty (electricians putty is recommended) to prevent reading ambient air temperature. Other recording arrangements may be considered if approved by CPHST.
6. Begin treatment when **all** the temperature sensors reach the threshold temperature of 160° F (71.1° C). Treatment will be complete when all temperature probe readings are at or above the threshold temperature for the entire 75 minutes.
 7. Temperature equipment will be certified by USDA APHIS PPQ personnel at regular intervals (suggested monthly) except in those cases where a facility is inactive in excess of 2 months. Certification will occur before production activities resume.

Stamp for TCD Firewood Certification

Samples of certification stamps available to be used for attachment to commercial labels or invoices moved with treated firewood produced under a compliance agreement for Thousand Cankers Disease. On this stamp, a two letter treatment designation follows the compliance agreement number. The letters represent treatments as follows: HT = heat treatment; DB = removal of bark and ½" of the underling wood; MB = methyl bromide fumigation; and KD = kiln drying.