



Treated Lumber (Draft Guidance)

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1. Purpose

The USDA organic regulations (7 CFR part 205) require that when organic producers use lumber on their organic farms, they must not use lumber treated with arsenate or other prohibited synthetic materials if the lumber is in contact with crops, soil, or livestock. This guidance on treated lumber provides information for organic producers and certifying agents (“certifiers”) to ensure consistent interpretation and enforcement of USDA organic regulations. The guidance clarifies how treated lumber installed by producers prior to certification impacts certification eligibility, provides information about using treated lumber outside of organic production areas, and describes the role of buffers and barriers in preventing contact between prohibited materials in treated lumber and organic production.

2. Scope

This guidance applies to (1) organic producers and (2) certifying agents operating under the Organic Foods Production Act of 1990 (7 U.S.C. chapter 94) and the rules of the USDA National Organic Program, the “USDA organic regulations” (7 CFR part 205).

3. Background

Lumber may be used by organic producers for a variety of uses, including but not limited to fences, trellises for crops, stakes, farm structures, and animal housing. Treated lumber is lumber that has been treated with a pesticide to prolong the useable lifespan of the lumber.

In 1995, the National Organic Standards Board (NOSB) voted unanimously to prohibit the use of lumber treated with arsenate and other prohibited materials. Upon final publication of the USDA organic regulations, the following was codified at 7 CFR 205.206(f), clarifying that only lumber in contact with soil or livestock was regulated:

The producer must not use lumber treated with arsenate or other prohibited materials for new installations or replacement purposes in contact with soil or livestock.

The intent of this requirement was to ensure that, over time, all lumber in contact with crops, soil, or livestock will be untreated, treated with nonsynthetic materials, or treated with allowed synthetic materials. Allowed synthetic materials are those included on the National List (7 CFR part 205).

At the time of the NOSB deliberations in 1995 and subsequent publication of the organic regulations, the most commonly used material to protect lumber from decay was chromated



copper arsenate (US EPA, 2011). Much of the original discussion about treated lumber in organic production focused on this material, including the NOSB's Technical Advisory Panel review (NOSB, 1995). Since the publication of the organic regulations, the availability of chromated copper arsenate (CCA) treated lumber has changed. The use of CCA was drastically reduced in the United States following a voluntary cancellation of most uses in 2003. Internationally, similar restrictions on the use of CCA exist, including in the European Union, Canada, Australia, New Zealand, and Japan (Read, 2003).

A number of synthetic materials are now commonly used in place of CCA. These include alkaline copper quaternary, copper azole, and micronized copper azole. These materials are not currently allowed in organic production, as they are not included on the National List.

Boric acid is currently included on the National List (7 CFR 205.601) for structural pest control, and lumber treated with boric acid is available. However, boric acid is more typically applied in accordance with the National List as a crack and crevice treatment or as a spot application. Boric acid is very water soluble, so lumber treated with boric acid is not typically used outdoors or in contact with soil, where moisture will leach the boric acid from the lumber (Rinehart, 2011).

To provide clarification on the treated wood prohibition, this guidance explains the NOP's current thinking about how producers may comply with USDA organic regulations and how certifiers should verify compliance to USDA organic regulations. The guidance addresses

- the eligibility of a parcel or operation for certification after installation of treated lumber;
- criteria to determine if treated lumber is in contact with crops, soil, or livestock, based on its location and use on the organic operation;
- use of barriers or buffers around treated lumber to prevent contact with soil, plant material or livestock; and
- the removal of previously installed treated lumber from organic operations.

4. Policy and Procedures

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4.1 Substances Addressed

This guidance addresses lumber treated with pesticides, including pesticides that are applied by manufacturers, certified operations, or other parties. Pesticides are broadly defined by the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. § 136) and include any substance intended to prevent, destroy, repel, or mitigate any pest. Substances applied to lumber that are not pesticides (e.g. paint without pesticides) are not within the scope of this guidance.

4.2 Contact with Organic Crops, Soil or Livestock

The USDA organic regulations at section 205.206 state that treated lumber must not contact soil or livestock, but do not discuss contact with crops. However, USDA organic regulations at section 205.201 require organic producers to describe in their organic system plan how they prevent contact of organic production with prohibited substances. Contact between crops, soil or livestock and prohibited materials contained in or on treated lumber must be prevented.

4.3 Treated Lumber and the Three-Year Transition

The USDA organic regulations require that land have no prohibited substances applied to it for a period of three years immediately preceding harvest of the crop. Treated lumber is classified by the US EPA as a “treated article”. For the purpose of pesticides, a treated article is an article that is treated with a pesticide to protect the article itself, i.e. the lumber (40 CFR § 152.25(a)). As pesticides in or on treated articles are only intended to protect the article itself, by definition, the use of treated lumber on land is not an application of prohibited substances to land, as described in section 205.202(b), and does not necessitate a three-year transition for the land. Although use of lumber treated with prohibited materials does not necessitate a three-year transition, USDA organic regulations still prohibit the use of lumber treated with prohibited materials for new installations and for replacement purposes contacting crops, soil or livestock (see Section 4.9 Noncompliance Policy).

4.4 Use of Treated Lumber prior to Certification

An operation’s use of lumber treated with prohibited materials prior to organic certification does not affect an operation’s timeframe for achieving certification. Section 205.206 prohibits use of lumber treated with prohibited materials in new installations and for replacement purposes in contact with soil or livestock. This requirement applies to operations already certified. Thus, lumber treated with prohibited materials and installed or used for replacement purposes prior to the operation achieving certification is permitted, provided there is no contact with crops.

Also, lumber treated with prohibited materials is not to be considered a “new” installation when the lumber was installed on a parcel prior to acquisition by a certified organic operation (lease, purchase, rent, etc.).



4.5 Locations and Uses

Lumber treated with prohibited materials in contact with crops is always prohibited. Lumber treated with prohibited materials in contact with soil or livestock is prohibited for new installations and replacement purposes. To determine if locations and uses of treated lumber comply with organic regulations, certifiers should first determine if the lumber contacts soil, crops, or livestock in the organic production area.

Examples of lumber in contact with soil or crops in an organic crop production area include:

- planter boxes, raised beds, or other planting containers where lumber contacts soil;
- trellises or stakes that support crops;
- trellis posts, including end posts and posts within a row (line posts);
- stakes or posts placed in soil to indicate rows or identify boundaries, next to crops;
- baseboards in high tunnels in contact with soil, with crops grown in soil.

Examples of lumber in contact with livestock in an organic livestock production area include:

- components of a living area in contact with animals;
- walls of a shelter, living area or pen;
- flooring in housing areas in direct contact with livestock;
- corrals and temporary holding pens;
- perching structures for poultry;
- feed bunks and watering troughs.

Examples of lumber that does not contact soil, crops, or livestock include:

- tables in greenhouses, where lumber has no contact with soil
- baseboards in permanent greenhouses, where all plants are grown in aboveground containers and do not contact lumber
- lumber used to support structures that are isolated from organic production areas, including employee/residential housing, equipment storage areas, and sheds
- lumber covered with some other allowed material (see “Barriers” below)

4.5 New Installations

Following certification, use of treated lumber for new installations or replacement purposes would comply with USDA organic regulations only if there is no contact with soil, crops or livestock in the organic production area.

Certifiers should determine if treated lumber used for new installations on certified operations is in contact with soil, crops or livestock. Certifiers should evaluate site-specific



conditions during inspection and review any use of treated lumber within the context of an operation's Organic System Plan.

4.6.1 Fences

Crop Production. Treated lumber may be used for fences that are not in contact with soil or crops in the organic production area. Contact is direct contact with any part of the plant under organic production, including direct contact with plant roots. Certifiers should evaluate site-specific conditions during inspection and review whether treated lumber in fences will contact soil or crops in the organic production area.

Livestock Production. Treated lumber may be used for fences that are not in contact with livestock in the organic production area. Contact is direct contact with livestock under organic production. Evaluating if fences will contact organic livestock may depend on a number of factors, including the parcel size, the physical terrain, and an organic producer's livestock management practices. Empirical evidence (observations) about the contact between livestock and fences on an organic operation can be an important and valid factor for evaluating compliance to USDA organic regulations. Placement of fencing that would result in likely or certain contact between livestock and lumber treated with prohibited materials would be prohibited by the USDA organic regulations.

4.6 Replacement Purposes

Lumber treated with prohibited materials must not be used for replacement purposes after obtaining organic certification, if the lumber is to be in contact with soil, crops or livestock. Lumber treated with prohibited materials that was previously installed or stored outside of organic production areas (no contact with soil, crops or livestock) may not be moved into organic production areas, where it will contact soil, crops or livestock.

4.7 Buffers and Barriers

Buffer zones and barriers, when effectively established, can serve to prevent contact between lumber treated with prohibited materials and soil, crops, or livestock. When contact is effectively prevented, these are acceptable means of complying with USDA organic regulations. The management practices and physical barriers established to prevent contact must be described in a producer's organic system plan. Certifiers should evaluate on-site practices to ensure that buffer zones or barriers are maintained and are adequate to prevent contact.

Buffer zones: A buffer zone is an area located between a certified production area and an adjacent land area that is not maintained under organic management (see 7 CFR 205.2). Buffer zones include areas where no crop is harvested (or grazed by livestock) and areas where crop is harvested but not sold as organic. A buffer zone may be established between lumber treated with prohibited materials and the organic production area to prevent contact



with soil, crops, or livestock and comply with USDA organic regulations. Buffer zones must be sufficiently sized or designed to prevent unintended contact.

Barriers: Various types of barriers are intended to prevent contact between crops, livestock, soil and lumber treated with prohibited materials. Barriers include electric fencing, barbed wire, metal flashing, and untreated lumber (used to prevent contact between livestock and treated wood, for example). A barrier could be used to prevent contact between organic livestock and the treated lumber posts or poles in a barn used to house livestock, for example. If a barrier will not sufficiently prevent contact, installation of a barrier is not an acceptable means to comply with USDA organic regulations. If a barrier is subject to degradation, decay, or other processes that result in the loss of effectiveness of the barrier, the producer must replace, repair or reapply the barrier at appropriate intervals. Certifiers should assess the effectiveness of barriers and buffers during the annual inspection-review cycle.

4.8 Noncompliance Policy

Use of lumber treated with prohibited materials for new or replacement purposes in contact with organic crops, livestock, or soil, is not in compliance with section 205.206(f) of USDA organic regulations and is subject to the noncompliance procedures in section 205.662. Producers could correct a noncompliance by removing lumber treated with prohibited materials or taking measures to prevent contact, such as applying a barrier or establishing a buffer zone. A three-year transition is not relevant to the correction of a noncompliance (see Section 4.3 Treated Lumber and the Three-Year Transition).

5. References

5.1. Organic Foods Productions Act of 1990 (7 U.S.C. 6501 et seq.)

5.2. NOP Regulations (as amended to date)

7 CFR 205.201 Organic production and handling system plan.

7 CFR 205.206 Crop pest, weed, and disease management practice standard.

5.3. National Organic Standards Board (NOSB)

Pressure Treated Lumber. Technical Advisory Panel Review, October 1995.

<<http://1.usa.gov/1hXG8L1>>.

5.4. Other Laws and Regulations

40 CFR 152.25 Exemptions for pesticides of a character not requiring FIFRA regulation
(a) Treated articles or substances.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

7 U.S.C. 136 Definitions (u) Pesticide.

5.5. Other

USDA National Organic Program, Final Rule. See “Prohibition on Use of Treated Lumber.” 65 FR 80566 (Dec 21, 2000).



Chromated Copper Arsenate. US Environmental Protection Agency (US EPA), July 2011. Web. 30 Sept. 2015.

Read, Deborah. "Report on Copper, Chromium and Arsenic (CCA) Treated Timber." New Zealand Environmental Risk Management Authority, April 2003.

Rinehart, Lee. "Pressure-Treated Wood: Organic and Natural Alternatives." National Center for Appropriate Technology, Sept. 2011.