Re-evaluation Note

REV2006-07

Label Guidance for Use of Chromated Copper Arsenate (CCA)

In April 2002, Health Canada's Pest Management Regulatory Agency (PMRA) announced in Re-evaluation Note <u>REV2002-03</u>, *Chromated Copper Arsenate (CCA)*, that the registrants of chromated copper arsenate (CCA) wood preservative products had agreed to make a transition away from the use of CCA in treated wood destined for the non-industrial market by 31 December 2003. The same agreement was reached in the United States between the registrants of CCA products and the United States Environmental Protection Agency. The Canadian registrants for all CCA products amended their product labels to implement that decision. All labels are undergoing a second revision to indicate more clearly the permitted uses of CCA.

The purpose of this document is to supplement the product labels with additional guidance for the treated wood industry and other interested stakeholders regarding the permitted uses of CCA for treatment of wood for industrial use.

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1.0 Permitted Uses of CCA

There have been two updates to the labels of CCA since April 2002. As indicated on current labels, only wood in the following categories can be treated with CCA:

- 1. Poles for highway and utility uses
- 2. Fence posts and poles as defined in CSA O80.16-97 for use on farms and piles, and round, half-round and quarter round fence posts and rails; poles, round posts and posts sawn four sides used as structural members on farms, and plywood used on farms.
- 3. Round poles and posts used in building construction.
- 4. Sawn crossarms.
- 5. Wood for marine construction (salt and brackish water immersion) and structures above the water level (including cross bracing of 50 mm \times 200 mm [2" \times 8"] and/or 75 mm \times 150 mm [3" \times 6"] and larger nominal dimensions) subject to frequent salt water splash from wave action and degradation by marine organisms.
- 6. Land, fresh water, foundation and marine piles as defined in CSA O80.3-97.
- 7. Lumber and plywood for permanent wood foundation as defined in CSA O80.15-97.
- 8. Sawn timbers 125 mm (5") and thicker used to support commercial structures or residential stilt home structures.
- 9. Structural glued-laminated members and laminations before gluing (mechanical fasteners may be used in combination with, or in lieu of glue) limited to commercial/industrial uses.
- 10. Plywood.
- 11. Structural composite lumber.
- 12. Shakes and shingles.
- 13. Wood for highway construction as defined in CSA O80-14-97, including lumber for bridges and structural members; lumber for cribbing, culverts and bridge parts; land, fresh water and salt water piles; structural lumber in salt water; posts (fence, guard rail, guide, sign and sight); lighting poles, bridge hand rails, guardrails, posts, and structural composite lumber.
- 14. Lumber, timbers and plywood for cooling towers.
- 15. Lumber for roller coaster construction.
- 16. Wood for construction of road salt storage buildings.

CCA can only be used for treating wood in the above categories, regardless of whether the treated wood is destined for foreign or Canadian markets. Wood products treated with CCA may only be sold or distributed for the uses noted on the label.

The new label for CCA products does not permit treatment of wood for virtually all uses where residential exposure is possible, including play structures, decks, picnic tables, residential retaining walls, landscaping timbers, residential fencing, patios, walkways and boardwalks. By agreement, many other uses of dimensional lumber have also been removed from use to limit the supply of wood that could be mistakenly used in residential settings.

As supplemental guidance to interpreting the label of CCA products, Table 1 of Appendix 1, presents examples of wood products that fall within the registered categories and may be treated with CCA, and Table 2 contains examples of wood commodities that can no longer be treated with CCA. These lists are not exhaustive, and questions concerning items not listed should be directed to the Pest Management Information Service at 1 800 267-6315. References to relevant Canadian Standards Association (CSA) O80 Series-97, Wood Preservatives, standards have been included in the tables of Appendix I for information purposes only, to aid those familiar with this system in interpreting the categories of wood commodities. However, some uses within these standards are no longer permitted. Always refer to the product label.

To prevent misunderstanding, Appendix II defines some wood industry terms used in Table 1 and Table 2 of this document.

The PMRA is continuing its re-evaluation of CCA in cooperation with the United States Environmental Protection Agency. Further changes to the registration status of CCA may result as an outcome of that review.

Users of pest control products should always check with the PMRA to obtain the current registration status and conditions for use as outlined on the registered label. The labels of registered pest control products are available electronically via the Electronic Labels: Search and Evaluation function on the PMRA's EDDEnet at http://eddenet.pmra-arla.gc.ca/4.0/4.01.asp.

Appendix I Guidance for Uses of CCA

Table 1 Examples of Wood Commodities That Can Be Treated With CCA

References to relevant CSA O80 Series-97, Wood Preservatives, standards have been included for information purposes only, to aid those familiar with this system. Some of the uses within the standards are no longer permitted. Refer to the product label or contact the Pest Management Information Service for current information on permitted uses.

Label	CCA Label Text	Examples of Wood Commodities That Can Be Treated With CCA	CSA O80 Series-97 Reference
1	Poles for highway and utility uses	Poles greater than 4.9 metres (16') for highway, utility distribution and transmission	O80.4-97
2	Fence posts and poles as defined in CSA O80.16-97 for use on farms, and round, half-round and quarter round posts as well as posts sawn four sides used as structural members on farms, and plywood used on farms	Poles and posts (round and sawn four sides) as structural members; fence posts (round, half-round and quarter round)	O80.16-97 in part ¹
3	Round poles and posts used in building construction	Round building poles and posts as structural members	O80.16-97
4	Sawn crossarms	Sawn crossarms for utility poles	O80.25-97
5	Wood for marine construction (salt and brackish water immersion) and structures above the water level (including cross bracing of 50 mm \times 200 mm (2" \times 8") and/or 75 mm \times 150 mm (3" \times 6") and larger nominal dimensions) subject to frequent salt water splash from wave action and degradation by marine organisms	Aquaculture, boat building, bulkhead sheathing, mariculture and oyster farming, lumber and timbers in salt water and subject to marine organism attack (e.g., fish ladders, lobster traps)	O80.18-97 in part ¹
6	Land, fresh water, foundation and marine piles as defined in CSA O80.3-97	Piles installed into land and fresh water, foundation piles, marine piles (in salt or brackish water and subject to marine organism attack)	O80.3-97
7	Lumber and plywood for permanent wood foundation as defined in CSA O80.15-97	Lumber and plywood for residential and light commercial wood foundations and foundation crawl space	O80.15-97 and CSA 0322
8	Sawn timbers 125 mm (5") and thicker used to support commercial structures or residential stilt home structures	Sawn timbers 125 mm (5") and thicker used as supporting members in buildings where replacement would be difficult (e.g., stilt homes)	

Label	CCA Label Text	Examples of Wood Commodities That Can Be Treated With CCA	CSA O80 Series-97 Reference
9	Structural glued-laminated members and laminations before gluing (mechanical fasteners may be used in combination with, or in lieu of glue) limited to commercial/industrial uses	Damp environment—above ground; dry environment—above ground, ground contact; highway material—glue laminated beams; nail laminated members (nails/mechanical fasteners may be used as laminate in combination with or in lieu of glue); structural glued laminated members.	O80.28-97
10	Plywood	Plywood for above ground, ground contact and coastal water uses, including boat building and building construction material (e.g., roof decking, tongue and groove, subflooring and flooring, garages, flatbed trailers, storage sheds)	O80.9-97 in part ¹
11	Structural composite lumber	Structural composite material used in highway construction; industrial, commercial and non-residential applications only	
12	Shakes and shingles	Shakes or shingles as roofing or siding, commercial/residential/agricultural, tile batts	O80.35-99
13	Wood for highway construction as defined in CSA O80-14-97, including lumber for bridges and structural members; lumber for cribbing, culverts and bridge parts; land, fresh water and salt water piles; structural lumber in salt water; posts (fence, guard rail, guide, sign and sight); lighting poles; bridge hand rails, guardrails, posts, and structural composite lumber	Beams and timbers for highways; other bridges built in accordance with highway construction details (e.g., vehicular bridges on golf courses) decking for bridges, posts for highway signs, and structural composite lumber	O80.14-97 in part ¹
14	Lumber, timbers and plywood for cooling towers	Lumber, timber and plywood for cooling tower use only	
15	Lumber for roller coaster construction	Lumber and timber used in the construction of roller coasters	
16	Wood for construction of road salt storage buildings	Lumber and timber used in the construction of road salt storage buildings	

See Table 2 for examples of uses that are not permitted.

Table 2 Examples of Wood Commodities That Can No Longer Be Treated With CCA

brackish water immersion) and structures above the water level (including cross bracing of 50 mm × 200 mm [2" × 8"] and/or 75 mm × 150 mm [3" × 6"] and larger nominal dimensions) subject to frequent salt water splash from wave action and degradation by marine organisms 13 Wood for highway construction as defined in CSA O80-14-97, including lumber for bridges and structural members; lumber for cribbing, culverts and bridge parts; land, fresh water and salt water piles; structural lumber in salt water; posts (fence, guard rail, guide, sign and sight); lighting poles; bridge hand rails, guardrails, posts, and structural composite lumber. 2 Fence posts and poles as defined in CSA O80-16-97 for use on farms, piles and round, half-round and quarter round posts as well as posts sawn four sides used as structural members on farms, and plywood used on farms. 10 Plywood Plywood Plywood in contact with food or where uptake of residues is possible; wood in contact with potable water; mushroom houses Plywood in contact with food where uptake of residues is possible (e.g., mushroom houses); plywood in contact with potable water (e.g., wells) All bridge ties and/or mine ties (except for highway construction) Lumber and timber for above ground, soil and fresh water use Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Wood for commercial-residential construction Playground equipment Ploor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ites sawn on all flour sides, landscape (core) ties sawn on all four sides, landscape	Label	CCA Label Text	Examples of Wood Commodities That Can NO LONGER Be Treated With CCA	CSA O80 Series-97 Reference
in CSA 080-14-97, including lumber for bridges and structural members; lumber for cribbing, culverts and bridge parts; land, fresh water and salt water; posts (fence, guard rail, guide, sign and sight); lighting poles; bridge hand rails, guardrails, posts, and structural composite lumber. 2 Fence posts and poles as defined in CSA 080.16-97 for use on farms, piles and round, half-round and quarter round posts as well as posts sawn four sides used as structural members on farms, and plywood used on farms. 10 Plywood Plywood in contact with food or where uptake of residues is possible; wood in contact with potable water; mushroom houses of residues is possible (e.g., mushroom houses); plywood in contact with potable water (e.g., wells) All bridge ties and/or mine ties (except for highway construction) Lumber and timber for above ground, soil and fresh water use Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Wood for commercial-residential construction Wood for commercial-residential Construction in part wood in contact with food where uptake of residues is possible; wood in contact with potable water; mushroom houses); plywood in contact with potable water (e.g., wells) All bridge ties and/or mine ties (except for highway construction) Decking products, landscape timbers, retaining walls that are above ground, not in contact with soil and fresh water Farm fencing (e.g., 25 mm × 150 mm [1" × 6"]), lattice, grape/tomato stakes Playground equipment Floor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers	5	brackish water immersion) and structures above the water level (including cross bracing of 50 mm \times 200 mm [2" \times 8"] and/or 75 mm \times 150 mm [3" \times 6"] and larger nominal dimensions) subject to frequent salt water splash from wave action	\times 200 mm [2" \times 8"] and/or 75 mm \times 150 mm [3" \times 6"] nominal dimensions),	O80.18-97 in part ¹
CSA 080.16-97 for use on farms, piles and round, half-round and quarter round posts as well as posts sawn four sides used as structural members on farms, and plywood used on farms. 10 Plywood Plywood in contact with food where uptake of residues is possible (e.g., mushroom houses); plywood in contact with potable water (e.g., wells) Bridge ties and mine ties All bridge ties and/or mine ties (except for highway construction) Lumber and timber for above ground, soil and fresh water use cannot be constructed and fresh water use construction Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Playground equipment Wood for commercial-residential construction Wood for commercial-residential construction Floor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers	13	in CSA O80-14-97, including lumber for bridges and structural members; lumber for cribbing, culverts and bridge parts; land, fresh water and salt water piles; structural lumber in salt water; posts (fence, guard rail, guide, sign and sight); lighting poles; bridge hand rails, guardrails, posts, and	Pedestrian only bridges	O80.14-97 in part ¹
of residues is possible (e.g., mushroom houses); plywood in contact with potable water (e.g., wells) Bridge ties and mine ties All bridge ties and/or mine ties (except for highway construction) Lumber and timber for above ground, soil and fresh water use Lumber, millwork, grape stakes (sawn four sides) Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Wood for commercial-residential construction Playground equipment Floor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers	2	Fence posts and poles as defined in CSA O80.16-97 for use on farms, piles and round, half-round and quarter round posts as well as posts sawn four sides used as structural members on farms, and plywood	of residues is possible; wood in contact with	O80.16-97 in part ¹
Bridge ties and mine ties All bridge ties and/or mine ties (except for highway construction) Lumber and timber for above ground, soil and fresh water use Decking products, landscape timbers, retaining walls that are above ground, not in contact with soil and fresh water Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Playground equipment Wood for commercial-residential construction Ploor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers	10	Plywood	of residues is possible (e.g., mushroom houses); plywood in contact with potable	O80.9-97 in part ¹
Lumber and timber for above ground, soil and fresh water use Lumber, millwork, grape stakes (sawn four sides) Sawn material and round material Wood for commercial-residential construction Playground equipment Floor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers		Bridge ties and mine ties	All bridge ties and/or mine ties (except for	O80.2-97
sides) [1" × 6"]), lattice, grape/tomato stakes Sawn material and round material Playground equipment Wood for commercial-residential construction Floor plates, studs, roof decking, decking exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers		_	Decking products, landscape timbers, retaining walls that are above ground, not in	O80.2-97
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construction exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers		Sawn material and round material	Playground equipment	
constructed with dimensional lumber, fence boards, skirtboards, sill plates, roofing curves, furring strips			exposed to weather, flooring, sawn posts and columns supporting decks, square fence posts, light fencing slats, pickets, landscape ties sawn on all four sides, landscape (core) ties sawn on two sides; steps for trailer homes, wood wedges to support trailer homes, horse and/or cattle trailers constructed with dimensional lumber, fence boards, skirtboards, sill plates, roofing	

See Table 1 for examples of uses that are permitted.

Appendix II Definitions

Beam: A structural member supported at two or more points, but not throughout its full length.

Board: Lumber that is less than 50 mm (2") in thickness and 50 mm (2") or more in width. Boards are also classified as fence boards, furring strips, strapping and decking products (i.e., 5/4 decking).

Brackish water immersion: Wood products intended for use in, or in contact with, brackish water.

Bulkhead sheathing: Consists of one or more pieces of plywood or lumber used to enclose or protect a portion of an in-water structure. See cribbing.

Crawl space: A shallow space between the lowest floor of a house and the ground.

Cribbing: An in-water structure designed to support a dock or wharf.

Cross arm: A piece of lumber designed specifically for use with a utility pole to suspend or hold transmission an/or distribution lines.

Cross bracing: Consists of one or more pieces of lumber used to increase the strength of the structure.

Dimension or dimensional lumber: Lumber that is from 50 mm (2") up to, but not including, 125 mm (5") in thickness and 50 mm (2") or more in width. Dimension also is classified as framing, joists, beams and rafters.

Fencing slats (light and heavy): A series of pieces of boards or dimensional lumber designed to provide privacy or to establish a barrier within a perimeter fence.

Floor plate: A structural member at the bottom of a wall assembly.

Furring strip: Thin piece of wood that is applied to a wall or other surface as support for the finish material or as part of a rainscreen assembly. These strips may also give the wall an appearance of greater thickness.

Girders: A term associated with steel beams. A structural member supported at two or more points, but not throughout its full length.

Glued laminated (glulam): A process in which individual pieces of lumber or veneer are bonded together with an adhesive or with a combination of adhesives and mechanical fasteners to make a single piece, with the grain of each piece running parallel to the grain of each of the other pieces.

Lumber: A wood product manufactured from logs by sawing, resawing and usually planing and/or all four sides sawn.

Mariculture: Farming of saltwater organisms either at sea or on the land.

Marine construction: Piles and timbers for marine construction including round timber piles, timber substructures exposed to tides, running water or wave action; timber substructures out of water but subject to salt water splash; and timber superstructures. This also includes framing, stringers and cross bracing (50 mm \times 200 mm [2" \times 8"], 75 mm \times 150 mm [3" \times 6"] and larger dimensions).

Permanent wood foundation (PWF): A foundation system in which treated wood products are used in place of concrete (PWF does not include sill plates, furring strips or skirt boards). It is a load-bearing lumber framed foundation wall system sheathed with plywood. Variations of the PWF system include the construction of a foundation crawl space.

Picket: Narrow pointed strip of wood used for fencing.

Pile (piling): Round timbers or poles that are driven into the ground to support a load, as a foundation for a structure or as part of a dock or mooring. Sawn timbers are sometimes used as piling in critical or in difficult to replace applications.

Plywood: A flat panel made up of a number of veneers of wood in which the grain direction is at right angles to the one adjacent to it. The veneers are bonded together under high pressure.

Pole: A long, usually round piece of wood greater than 4.5 metres (16'), manufactured from a log with the bark removed, used to carry utility wire or for structural building applications.

Post (round): A piece of wood shorter than 4.5 metres (16') cut from round, live sound timber. May be re-manufactured into half-round, and quarter-round posts for agricultural or highway use.

Post (sawn): A piece of lumber, less than 4.5 metres (16') in length, used in a vertical position to support a beam or other structural member in a building, and having dimensions of 5" or more in width, with the width not more than 50 mm (2") greater than the thickness (i.e., $125 \text{ mm} \times 75 \text{ mm}$ or $5" \times 3"$).

Retaining wall: A structure designed to keep a bank of ground from collapsing or eroding.

Roof decking: Refers to a surface exposed to the outdoors, located over a living space and intended to perform the function of a roof.

Sawn four sides: A saw milling term used to describe the manner in which a sawlog has been cut on four sides.

Shake: A shingle split (not sawn) from a block of wood and used for roofing and siding.

Shingle: A relatively thin and small unit of roofing partially laid in overlapping layers as a roof covering or as cladding on the sides of buildings.

Sight post: A term used by highway departments to designate a light system either on or near a highway.

Sill plate: A structural member anchored to the top of a foundation wall, upon which the floor joist rest.

Stringer: A horizontal timber used to support floor joists or other cross members. Also used in the construction of stairs (i.e., stair stringer).

Structural composite lumber: An engineered wood product that combines wood fibre and exterior-type adhesives to form a lumber product. The wood fibres may be in the form of veneers, strand, or a combination thereof bonded together with structural adhesives.

Subject to salt water splash: An member of a marine structure which is positioned above mean high tide, but is subject to frequent wetting from wave action or wind, which supports intermittent degradation by marine organisms.

Tie: A tension member in a frame or truss assembly. The term ties is also used in railway track systems and in this application it provides a bed for the railway track as well as preventing the tracks from moving.

Tile batt (batten): A narrow strip of wood to which roof tiles, shakes or shingles are hung.

Timber: A size classification of lumber that includes pieces that are at least 125 mm (5") in their smallest dimension; also classified as beams, stringers and girders.