Help Eliminate Dangerous Wood Preservatives

Chemical wood preservatives account for the single largest pesticide use in the United States and one of the greatest pesticide threats to public health and the environment. Wood preservatives—used to protect wood products from fungus, insects and decay—and their contaminants are found in over two thousand hazardous waste sites across the country, and are among the most hazardous chemicals known to humankind. They are subject to expensive government cleanup efforts at a rate of nearly one billion pounds a year.

The three heavy-duty wood preservatives used most widely include chromated copper arsenate (CCA), pentachlorophenol (penta), and creosote. The hazards associated with the use, storage and disposal of these three products are unnecessary, given that viable alternatives are available for all uses. Local, state and federal policy is urgently needed to protect public health and the environment from these unnecessary risks.

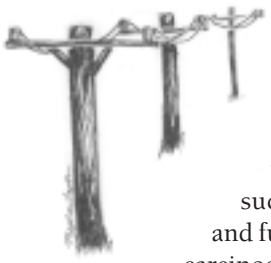
The U.S. Environmental Protection Agency (EPA) has pursued an inordinately slow review process, which began in the 1970s and has been extended year after year, ignoring much of the existing evidence that establishes these chemicals as imminent hazards. After a Special Review in the late 1970s and 1980s, EPA retained many uses of these chemicals because it could not identify viable alternatives. Recent information concerning exposure risks and available alternatives to CCA, penta, and creosote in the marketplace justify immediate action.

CCA: EPA's phase-out does not fully protect the public

The arsenic in CCA is a known human carcinogen and has been linked to nervous system damage and birth defects.[1] About 138 million pounds of CCA are used to treat wood each year.[2] Children are particularly vulnerable to the hazardous effects of CCA simply because of where they play. CCA-treated wood products are used in decks and patios, picnic tables, playground equipment, walkways/boardwalks, landscaping timbers, and fencing.

EPA recently announced a voluntary phase-out of CCA by the pressure-treated wood industry. After December 2003, wood for residential uses may no longer be treated with CCA. However, this wood can continue to be sold off until supplies are exhausted. While this phase-out is a positive first step, it does not adequately protect public health or the environment. The following CCA issues must still be addressed:

1) Phase-out is too long, allowing continued public exposure to arsenic, and should be technically feasible by the end of 2002;
2) Public awareness about how to test for and how to prevent arsenic leaching from existing structures;
3) Safe disposal methods; and,
4) The voluntary cancellation should include industrial uses of CCA, such as utility poles and marine pilings, as there are viable alternatives such as recycled steel poles and composite pilings.



Penta: More hazardous than CCA and should be immediately banned

The public health and environmental effects presented by penta are extraordinary because of contaminants such as hexachlor-obenzene, dioxins, and furans. Penta and its contaminants are carcinogens and endocrine disruptors, and several of its contaminants are persistent organic pollutants (POPs).[3] Approximately 656 million pounds of penta are used to treat wood each year.[2]

Nearly all non-wood and most wood uses of penta were banned in 1984 because of fetotoxicity and oncogenicity risks and the availability of viable substitutes. Today, over 95 percent of penta is used to treat utility poles. Despite its failure to totally ban penta in the 1980s, now there are less toxic, reliable, and affordable alternatives that readily exist in the marketplace, such as recycled steel, composite, and cement poles.

Creosote: A toxic concoction of 10,000 chemicals

Creosote is a complex mixture of many chemicals. About 300 chemicals have been identified in coal-tar creosote, but there could be as many as 10,000 chemicals present.[4] Three of the classes of chemicals found in coal-tar creosote that are known to cause harmful health effects are polycyclic aromatic hydrocarbons (PAHs), phenol, and cresols.[4] Creosote is made up of about 75-85 percent PAHs, and several of them are known to cause cancer.[5]

The American Wood Preserver's Institute estimates that approximately 1.1 billion pounds (124 million gallons) of creosote is used annually.[6] Coal tar creosote, coal tar, and coal tar pitch have been found in at least 59 of the current or former sites on the EPA Superfund National Priorities List.[6] Creosote is primarily used for railroad ties, but today there are viable alternatives such as recycled plastic and concrete.

What You Can Do

Educate the media and policy makers at the local, state, and federal levels about these issues. Use the model policy outlined below to introduce local or state policy. Using this, policy makers can take action to immediately suspend and ban all three wood preservatives, and to protect the public and the environment from existing structures and unsafe disposal practices.

For more background information, see copies of Beyond Pesticides/NCAMP's petitions to the EPA to suspend and ban CCA, penta, and creosote. These can be found on our website at www.beyondpesticides.org or contact our office for copies ($5.00 ppd; 58 pgs). You can also read our fact sheet entitled *Protecting Your Health from CCA-Treated Wood.*

Protection From Toxic Wood Preservatives Policy

(A Beyond Pesticides Model Policy)

WHEREAS, the inorganic arsenicals, such as Chromated Copper Arsenate (CCA), contains arsenic which has been classified by the U.S. EPA as a Group A, known human carcinogen;

WHEREAS, CCA also contains hexavalent chromium, which is classified by the U.S. EPA as a Group A, known human carcinogen of high carcinogenic hazard;[7]

WHEREAS, the U.S. EPA has classified pentachlorophenol (penta), as a Group B2, probable human carcinogen;

WHEREAS, the contaminants of penta, namely dioxins, furans, and hexachlorobenzene (HCB) which are classified as Persistent Organic Pollutants (POPs) and recognized as carcinogens, mutagens, teratogens, and endocrine disruptors;

WHEREAS, penta is already banned in several countries due to health or environmental risks; [8]

WHEREAS, the U.S. EPA has classified creosote, as a probable human carcinogen; [9]

WHEREAS, creosote contains carcinogenic polycyclic aromatic hydrocarbons, which are listed on the U.S. EPA's Priority list of hazardous substances;[10] and,

WHEREAS, at least 419 Superfund chemical waste sites in the United States have been contaminated with penta, 54 Superfund sites have been contaminated with creosote, and 1,656 Superfund sites are contaminated with arsenic.[11]

Section 1. Prohibition of Purchase by the *[State/City]* and its Agencies, of Wood Treated with Pentachlorophenol, Creosote, or Inorganic Arsenicals (Heavy-Duty Wood Preservatives)

(a) No *[Name of State/City]* funds shall be used by any *[State/City]* agency to purchase wood or wooden structures and other wood materials (including playground equipment, park benches, picnic tables, decks, utility poles, fencing, edging, mulch, etc.) that have been treated with any of the following heavy-duty wood preservatives:

(1) Pentachlorophenol;

(2) Creosote;

(3) Inorganic arsenicals, including arsenic, elemental arsenic, or arsenic copper combinations such as chromated copper arsenate (CCA).

(b) *[Name of State/City]* agencies shall not use any *[State/City]* funds for the retreatment of any wood structures treated with the heavy-duty wood preservatives that are prohibited from purchase pursuant to subsection (a) of this section unless the *[State/City]* agency treats the wooden structures with nontoxic and nonslippery sealers.

(c) After the date of enactment of this ordinance, all *[State/City]*-owned wood or wooden structures or materials, treated with any of the heavy-duty wood preservatives, having reached the end of their useful life, shall be replaced by either alternatives to wood, or wood that has not been treated with any of the heavy-duty wood preservatives.

Section 2. Removal of State-Owned Wood Treated with Heavy-Duty Wood Preservatives

The *[State/City[* shall conduct a monitoring program to determine the extent to which existing *[State/City]*-owned wood structures and materials treated with arsenical or penta wood preservatives present a health hazard to local citizens and therefore should be removed from use. The monitoring program shall measure the level of arsenic or penta (i) in the soil around the structure and (ii) dislodgeable residues on the surface of the wood. Where the *[State/City]* finds levels of arsenic or penta above the currently accepted standard for harmful exposure, the structures shall be removed and remediation initiated. Based on findings of these chemicals, *[State/City]* shall:

(a) require remediation of structure and/or soils to eliminate arsenic;

(b) require application of least-toxic sealants regularly, as needed (i.e., on a yearly basis, depending on local weather conditions), and that public awareness sheets be clearly posted in all public areas; or

(c) remove and dispose of (in accordance with Section 6) structures with arsenic or penta residues on wood surfaces or in surrounding soil.

Section 3. Mandatory Consumer Awareness Program

(a) *[Name of State/City]* shall immediately implement a comprehensive mandatory Consumer Awareness Program for non-industrial uses of CCA-treated wood, including all wood used in play-structures, decks, picnic tables, landscaping timbers, residential fencing, patios and walkways/boardwalks.

(b) The mandatory Consumer Awareness Program shall inform and require all public schools and recreational centers to conduct soil and surface leaching tests around all public structures made with CCA-treated wood products, including (but not limited to) public playgrounds, decks and picnic tables.

Section 4. Immediate Prohibition on Burning and Mulching of CCA-Treated Wood

A. *[Name of State/City]* shall immediately prohibit the burning of CCA-treated wood.

B. *[Name of State/City]* shall immediately prohibit the mulching of used wood products containing CCA, and the selling of mulch or similar products that contain CCA.

Section 5. Storage of State-Owned Wood Treated with Heavy-Duty Wood Preservatives

[Name of State/City] agencies responsible for storing wood treated with any of the heavy-duty wood preservatives shall store such treated wood under cover from all forms of precipitation. All run-off produced from treated wood in storage shall be collected and monitored for heavy-duty wood preservative leachate.

Section 6. Safe Disposal of Heavy-Duty Wood Preservatives

(a) *[State/City]* shall adopt policies that exceed the *Resource Conservation and Recovery Act* (RCRA), 40 CFR 261.4(b), by categorizing wood treated with heavy-duty preservatives as hazardous waste. 40 CFR 261.4(b) is quoted below:

"*Solid wastes which are not hazardous wastes.* The following solid wastes are not hazardous wastes: ... (9) Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood product for these materials' intended end use."

(b) In the *[City/State]*, all CCA-treated wood products shall be disposed of in a lined landfill designed to handle hazardous waste, with a leachate system and groundwater monitoring system.

Section 7. This Act Shall Be Enforced Six Months After Its Enactment

This Act shall pertain to the use of the heavy-duty wood preservatives on wood structures on all lands with the political jurisdiction of the *[State/City]* beginning six months after its enactment.

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11 ATSDR. 2001. Internet Hazdat – Site Contaminant Query. http://www.atsdr.cdc.gov/gsql/sitecontam.script.