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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

January 5, 2005

Senator Scott W. Cowger, Chair
Representative Theodore S. Koffman, Chair
Joint Standing Committee on Natural Resources
122nd Maine Legislature
State House
Augusta, Maine 04333

Dear Senator Cowger and Representative Koffman,

Attached is a report concerning the safe management of arsenic-treated wood wastes submitted to the Natural Resources Committee in response to the provisions of PL 2003, Chapter 457 ("An Act to Protect Public Health by Reducing Human Exposure to Arsenic"). Specifically, the law required that the Department develop, in consultation with interested parties, a plan for the safe management of arsenic-treated wood waste including but not limited to, recommendations regarding: (1) the separation and segregation of arsenic-treated wood at solid waste handling facilities; (2) restrictions on the combustion of arsenic-treated wood at incineration facilities, biomass boilers and other boilers; and, restrictions on the disposal of arsenic-treated wood at unlined landfills. We plan to implement the recommendations as presented in this report and would welcome a letter from the Committee confirming this expectation.

We look forward to discussing this report with you and other members of the Committee.

Sincerely,

Dawn R. Gallagher
Commissioner

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Report to the Joint Standing Committee on Natural Resources
Concerning the Safe Management of Arsenic-Treated Wood
Wastes

Submitted by:
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection

January 2005

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I. INTRODUCTION

Public Law 2003, Chapter 457, "An Act to Protect Public Health by Reducing Human Exposure to Arsenic" addressed several different aspects of potential arsenic exposure, identified by the Legislature as a serious environmental and public health issue in Maine. Specifically, the law:

- Restricted the sale of arsenic-treated wood in Maine;
- Required a report from the Department of Human Services concerning arsenic in private drinking water wells (October 1, 2004);
- Required a report from the Real Estate Commission on efforts within the industry to increase awareness of arsenic hazards (October 1, 2004);
- Required a report from the Department of Environmental Protection on sales and use of arsenic treated wood (January 1, 2004); and,
- Required a plan from the Department of Environmental Protection for the safe management of arsenic-treated wood waste (January 1, 2005)

A copy of PL 2003 Chapter 457 is attached as **Appendix A** of this report.

This report is submitted to the Joint Standing Committee on Natural Resources pursuant to Section 3 of that law. Specifically, Section 3 requires: "By January 1, 2005, the Department of Environmental Protection shall submit to the joint standing committee of the Legislature having jurisdiction over natural resources matters a plan for the safe management of arsenic-treated wood waste. The plan must be developed in consultation with interested parties. The plan must include, but is not limited to, recommendations regarding: 1. The separation and segregation of arsenic-treated wood at solid waste handling facilities; 2. Restrictions on the combustion of arsenic-treated wood at incineration facilities, biomass boilers and other boilers; and, 3. Restrictions on the disposal of arsenic-treated wood at unlined landfills."

To assist in the development of a report, the Department convened an advisory group consisting of representatives of municipal solid waste facilities, private solid waste landfills, biomass combustion companies, consulting companies, the wood treatment industry, a waste derived fuel company, the Maine Municipal Association and the Environmental Health Strategy Center. Department participants included staff with expertise in solid waste management, air quality management, and geology. The advisory group also received information from and participation by: Dr. Dana Humphrey with the University of Maine Department of Civil and Environmental Engineering and Dr. Diana Graham of Keller and Heckman LLP. A list of invited advisory group members and their affiliations is attached as **Appendix B**.

II. BACKGROUND – ARSENIC TREATED WOOD

A. History of Use¹

Wood preservatives are chemicals that protect wood from biological deterioration or delay combustion due to fire. The primary oilborne preservatives to date have been pentachlorophenol, creosote, and fire-retardants. The primary waterborne wood preservative used until 2004 has been a preservative commonly referred to as "CCA" (chromated copper arsenate). CCA is composed of the oxides or salts of chromium, copper, and arsenic. The copper helps protect the wood from attack by fungus while the arsenic protects the wood from attack by insects and some marine organisms. In 1996, CCA-treated wood represented over 90% of the waterborne preserved wood being sold in the United States. Wood treated with CCA commonly retained different quantities of CCA ranging from one-quarter of a pound of CCA per cubic foot of wood up to 2.5 pounds of CCA per cubic foot of wood. The quantity involved depended upon the intended use of the product.

The wide-scale use of CCA treated-wood started in the 1970's and continued to grow until its use peaked around 1996. In 1970, 39 million cubic feet of CCA-treated wood products were produced in the US. By 1996, this number had increased twelve-fold to 467 million cubic feet of CCA-treated wood products.

B. Sales Ban

On March 17, 2003, the U.S. Environmental Protection Agency signed an order in response to a voluntary request by wood preservative pesticide producers for cancellation of registration and termination of uses of certain CCA products. This agreement required that use of CCA for most identified residential uses cease by December 31, 2003. U. S. EPA published this notice of cancellation order in the Federal Register on April 9, 2003.

PL 2003 Chapter 457 established the following restriction on the sale of arsenic-treated wood or wood products for residential uses: "Beginning April 1, 2004, a person may not sell or offer for sale arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003." The

¹ Solo-Gabriele, Helena and Timothy Townsend, *Generation, Use, Disposal, and Management Options for CCA-Treated Wood*, Florida Center for Hazardous Waste Management, Report #98-1, May 1998

prohibition does not apply to structures already built and containing arsenic-treated wood that are sold as part of a residential real estate transaction.

In June and July of 2004, the DEP surveyed and visited 82 representative lumberyards, building supply companies, and wood retail companies throughout all regions of the State. This survey found no company that was selling arsenic-treated wood for any use prohibited by Maine law or the EPA notice of cancellation order. Many of these companies stopped selling arsenic-treated wood well before the sales ban for residential uses went into effect. Most of the companies surveyed had no stocks of any arsenic-treated wood and indicated that they did not plan to stock any arsenic-treated wood but would only provide it through special order for a permitted use.

C. Arsenic Treated Wood Use – Volumes and Geography

Wood deterioration is caused by both insect attacks and fungal decomposition. The potential for this deterioration varies widely within the US and is dependent upon moisture and warmth. A map of wood deterioration potential in a report by the Florida Center for Hazardous Waste Management rates deterioration potentials from "Low" in the desert areas of the West to "Severe" in the deep Southeast. Maine's wood deterioration potential is ranked the second lowest of five rankings. The need for and the extent of use of treated wood such as CCA in various parts of the country roughly correlates with the wood deterioration potential ranking. Four states: Florida, Georgia, Alabama and Mississippi accounted in the report for fully 25% of the nation's wood treatment capacity.²

In 2003, the Department hired the firm of Environmental Management to contact Maine wood treaters, national wood treatment associations, and Maine wood retailers and wholesalers to determine the amount of treated wood sold during the previous year in the State. The resulting report: "A Market Evaluation of the Sale of Arsenic-treated Wood in Maine" is attached as **Appendix C**. Environmental Management reported that roughly 55 million board feet of treated wood were sold in Maine in 2003.³

D. Risk Reduction – Existing Uses

The Connecticut Agricultural Experiment Station found that coating CCA-treated wood surfaces with a latex acrylic solid color stain, polyurethane deck and porch enamels, or a spar varnish reduced the amount of arsenic dislodged from those surfaces by more than 95% over a one year test period. Using a semi-transparent oil stain containing alkyl resins resulted in a

² Ibid.

³ *A Market Evaluation of the Sale of Arsenic-treated Wood in Maine*, Environmental Management, December 2003.

reduction that averaged 90% and ranged from 80-97%.⁴ Similarly, a study by other researchers found that solid-color oil-based stain, solid-color acrylic latex stain, and acrylic latex topcoat paint had 75%, 80%, and 95% of the original finish remaining respectively after 2 years.⁵ Such coatings may lengthen the useful life of existing CCA-treated wood construction and may also reduce the leaching and contact risks that CCA-treated woods present in some existing structures.

E. Arsenic Treated Wood Waste – Volumes

Information from knowledgeable individuals on the arsenic-treated waste wood advisory group and work done by the Department of Civil and Environmental Engineering at the University of Maine indicates that CCA-treated wood makes up somewhat less than 2% of the wood disposed as construction and demolition (C&D) debris in Maine each year. By comparison, it is estimated that roughly 6% of Florida's wood waste is CCA-treated wood. The relative percentage of CCA-treated wood in the wood waste stream is important in evaluating the appropriateness of specific disposal and handling options. In a state with high CCA-treated wood use, such as Florida, some construction and demolition debris utilization and disposal options may be precluded without instituting complex and costly sorting and sampling technologies.⁶

It is estimated that approximately 323,000 tons of construction and demolition debris are disposed in Maine each year. Roughly 40% of this debris is waste wood. Of this wood portion, approximately 2% of that waste wood is CCA-treated wood or similar treated wood. This calculates to approximately 2,600 tons of CCA-treated wood waste generated in Maine each year. In 2001, 1,844,059 tons of municipal solid waste was generated in Maine.⁷ Currently, CCA-treated wood wastes make up approximately 0.8% of Maine's annual construction and demolition debris wastes and less than two-tenths of 1% of Maine's annual volume of municipal solid waste.

A question of concern is how much CCA-treated wood disposal will increase due both to increasing CCA-treated wood sales between 1970 and 1996, and the fact that much of the CCA-treated wood used in construction still has not reached the end of its estimated useful life. In Florida, the amount of

⁴ Stilwell, David E., *Environmental Issues On The Use of CCA Treated Wood*, Department of Analytical Chemistry, The Connecticut Agricultural Experiment Station, December 1998.

⁵ Feist, William C. and Alan S. Ross, *Performance and Durability of Finishes on Previously Coated CCA-Treated Wood*, Forest Products Journal, VOL. 45, No. 9.

⁶ *DRAFT Guidelines for the Management and Disposal of CCA-Treated Wood*, Florida Center for Solid and Hazardous Waste Management, July 2004.

⁷ *2001 Solid Waste Generation and Disposal Capacity Report to the Joint Standing Committee on Natural Resources of the 121st Legislature*, Waste Management & Recycling Program - Maine State Planning Office, December 2002.

discarded CCA-treated wood is expected to increase three-fold over the next decade. The volume of Maine's CCA-treated waste wood is not expected to increase to this extent because of differences in the patterns of CCA-treated wood use and the volume used in this state. Florida's replacement structure needs (potentially resulting in the generation of CCA-treated waste wood) are generally higher than Maine's, in part because of its hot humid climate, severe weather events such as hurricanes, and generally higher construction and reconstruction rates.

Although a substantial increase in waste wood volume is not expected in Maine, the total and relative amounts of CCA-treated wood discarded in Maine should be tracked and used to continue to reexamine the conclusions and recommendations contained in this report.

III. EVALUATION OF WASTE HANDLING & DISPOSAL METHODS

A. Mulch and Compost

Sawdust and chips from CCA-treated wood can present health and environmental risks if mixed with chipped clean wood and used for mulch or as a bulking agent in composts. Researchers unexpectedly found the inclusion of CCA-treated wood in landscape mulch products in Florida. This apparently resulted from the processing of construction and demolition debris wood into mulch. The same concern can arise if the chipped waste wood is used as a bulking agent in compost. The concerns presented by the contamination of landscape mulch or compost by CCA-treated wood are twofold. The first is that arsenic and/or the other metals in the mulch may leach into ground water, into surface water or may contaminate the soil to which it is applied. The second is a concern over direct human exposure during production or use of that mulch or compost.⁸

There have been no known instances in Maine of either landscape mulch or compost being contaminated by CCA-treated woods. Regulatory standards for wood waste composting and mulch production facilities under "permit-by-rule" provisions of the Solid Waste Management Rules specify that these facilities may not accept "painted wood, treated wood, chipboard, plastic, wood with fasteners, nails, paint or coatings, or wood that is otherwise contaminated".

B. Combustion/Burning

1. Open Burning

⁸ Townsend, Timothy G., Brajesh Dubey and Helena Solo-Gabriele, *Assessing Potential Waste Disposal Impact from Preservative Treated Wood Products*, University of Florida.

Maine solid waste and air quality regulations prohibit the open-burning of CCA-treated wood. Backyard burning of CCA-treated wood, as well as burning CCA-treated wood in a woodstove, is an extremely unsafe and environmentally damaging practice. Burning arsenic-treated wood in this way releases arsenic into the air at ground level. It can quickly increase concentrations of arsenic in the wood ash that remains to levels that exceed risk standards that will cause that ash to be a hazardous waste. Conversely, wood ash derived from burning clean wood (wood not contaminated by other materials, paints or chemicals) is often used as a soil amendment to improve soil quality and nutrients.

Serious cases of human and animal poisoning have been documented and attributed to burning CCA-treated wood in fireplaces or wood stoves or spreading the resulting ash on the ground.⁹

2. Municipal Solid Waste Combustors

Four municipal solid waste (MSW) combustors are licensed in Maine: Maine Energy in Biddeford, Regional Waste Systems (RWS) in Portland, Mid Maine Waste Action Corporation (MMWAC) in Auburn, and Penobscot Energy Recovery Company (PERC) in Orrington. There is some degree of variability in terms of combustion technology and air emissions controls at each of these facilities. Maine Energy is a refuse-derived fuel (RDF) unit utilizing a spray dryer absorber and baghouse to control air emissions. RWS is a mass burn unit utilizing a spray absorber, carbon injection and an electrostatic precipitator (ESP) to control emissions. MMWAC is mass burn unit utilizing a spray dryer absorber, carbon injection and a baghouse to control emissions. PERC is an RDF unit utilizing a spray dryer absorber and baghouse to control emissions

These combustion facilities may receive small quantities of arsenic-treated wood mixed with household trash. Construction and demolition debris (a fraction of which may consist of CCA-treated wood) is not typically mixed with other household wastes sent for incineration. Some construction and demolition debris waste containing CCA-treated wood may, however, be incidentally mixed with municipal solid waste that is sent to and burned by MSW combustors. If construction and demolition debris is sent to an MSW combustor, it is typically removed from the tipping room floor, set aside and not burned. MSW combustors do not generally accept large quantities of demolition debris in which CCA-treated wood might be included and overlooked.

⁹ Wilson, Alex, *Disposal: The Achilles' Heel of CCA-Treated Wood*, EBN, Vol. 6, No.3, March 1997.

The pollution control equipment used by the municipal waste combustors is at the upper end of arsenic control technology. The combination of a spray dryer absorber and ESP or baghouse achieves 99.99% removal of particulate matter, of which arsenic is a component. Also, each of these facilities either had, or will be required to have in the future, a stack test to determine arsenic emission rates. Although there is no federal air emission limit for arsenic, MMWAC has a pound per hour limit and RWS will have one after a required stack test in 2005.

3. Wood Fired Boilers

Five wood-fired power generating facilities (aka “biomass” boilers) are licensed to burn wood from construction and demolition debris (CDD) as a fuel substitute for other regular fuel such as whole tree chips: Boralex Livermore Falls, Boralex Stratton Energy, Boralex Ashland, Greenville Steam and Wheelabrator Sherman. Each of these units uses a cyclone followed by an electrostatic precipitator to control approximately 99.99% of the particulate matter emissions from the flue gas.

Through its licenses, the Department requires that the quantity of chromated copper arsenate (CCA) treated wood introduced into the CDD fuel stream is minimized to the greatest extent possible. The Department has worked with CDD processors, municipalities, fuel suppliers and the wood fired facilities to ensure that the percentage of CCA-treated wood in fuel is minimized. The Department and several biomass facilities have worked cooperatively to develop and implement a study intended to more clearly demonstrate the relationship between the quantity of CCA-treated wood burned in the boilers and arsenic emissions from the stacks and ash characteristics. The Department has previewed the preliminary data from the study and concluded that setting a standard for the amount of CCA-treated wood present in the fuel itself is appropriate in order to ensure minimization of arsenic treated wood in the fuel and thus reduce arsenic air emissions to the greatest extent possible.

C. Landfills

1. Leaching and Chemical Characteristics of Arsenic Relevant to Landfill Disposal

Arsenic-treated wood is manufactured with varying concentrations of CCA depending on the intended use of the wood. Experimental results indicate the rate at which arsenic is leached from treated wood is based on the extent to which the wood is weathered, the amount of arsenic in the treated wood,

and the experimental procedure used to assess the leaching characteristics of the wood^{10,11}.

Levels of arsenic leached from new treated wood are generally consistent (1 – 9 mg/L) and not dependent on the concentration of arsenic in the wood¹². However, weathered treated wood leaches arsenic at a higher rate than new treated wood and the rate of leaching is related to the levels of CCA in the wood. Weathered wood treated with the highest levels of CCA leaches arsenic at the highest rates (~12 mg/L)¹³. Leaching levels are also enhanced under extreme pH conditions typically not found in the natural environment.

The presence of arsenic in groundwater may be the result of leaching from man-made sources, such as CCA-treated wood, or through the release of arsenic from soil and/or rock due to changing geochemical conditions in an aquifer. Arsenic can be released into an aquifer under relatively strong reducing groundwater conditions produced by organic-rich landfill leachate. Under these conditions mineral oxides dissolved from the aquifer matrix release naturally occurring arsenic¹⁴. Therefore, a landfill that does not contain arsenic bearing waste (e.g. CCA-treated wood) may contribute to the presence of arsenic in groundwater. In a landfill setting there is no easy method for distinguishing the source of arsenic that may be detected in groundwater.

2. Disposal in Secure (Lined) Landfills

Leachate and groundwater quality data was reviewed for fourteen (14) secure landfills in the State of Maine including nine (9) municipal solid waste facilities and five (5) special waste facilities. Secure landfills are those facilities with engineered liner and leachate collection systems, designed to contain landfill leachate that could contaminate ground and surface water if released to the environment. The special waste facilities were comprised exclusively of paper mill sludge landfills where the disposal of CCA-treated wood has typically not occurred. Most of these facilities include multiple expansions with liner systems reflective of the technology available at the

¹⁰ Khan, Bernine I., et al., Arsenic speciation of Solvent-Extracted Leachate from New and Weathered CCA-Treated Wood, *Environ. Sci. Technol.* 2004, 38, 4527 – 4534.

¹¹ Solo-Gabriele, Helena, et. al., Arsenic and Chromium Speciation of Leachates from CCA-Treated Wood, State University System of Florida, Florida Center for Solid and Hazardous Waste Management, Report #03-07, submitted May 30, 2003 (Draft).

¹² Khan, Bernine I., et al., op.cit.

¹³ Khan, Bernine I., et al., op.cit.

¹⁴ Smedley, P.L. and D.G. Kinniburgh, A Review of the Source, Behaviour and Distribution of Arsenic in Natural Waters, *Pergamon, Applied Geochemistry* 17 (2003) 517 568.

time they were constructed. Therefore, a particular landfill could include both lined and unlined portions.

Arsenic was detected in leachate from both secure municipal and special waste landfills. The data reviewed for this assessment included leachate arsenic results for 668 samples from municipal landfills and 825 samples from special waste landfills. Arsenic was detected in 75% of the municipal landfill leachate samples and 66% of the special waste landfill samples. Average arsenic concentration for both municipal and special waste landfill leachate ranges between 0.09mg/L and 0.035 mg/L, but occasionally exceeds 1.0 mg/L.

It is interesting to note that arsenic is detected in the leachate of the subject special waste landfills since, as noted earlier, CCA-treated wood is not disposed in these facilities. Waste materials in the special waste landfills reviewed consisted primarily of sludge from the paper making process, possibly mixed with boiler ash. Wastes in municipal landfills are considerably more varied and can include CCA-treated wood and other potential sources of arsenic. Soil can be used as an intermediate cover material at both types of facilities and could itself be an arsenic source. Strongly reducing chemical conditions (conditions under which chemical reactions cause drastic decreases in concentrations of dissolved oxygen) occur within municipal and special waste landfills as a result of decomposition of organic materials. Under these conditions, arsenic bound to mineral oxides in soils used for cover material would be released into leachate. Arsenic may also be released from waste materials under the same conditions.

In general, there did not appear to be a significant difference in arsenic detection and leachate concentrations for landfills not receiving CCA-treated wood (special waste landfills) vs. landfills that may possibly have included CCA-treated wood in their waste stream. These results are consistent with a recent study performed in California¹⁵.

3. Disposal in Unlined CDD Landfills

The Department evaluated monitoring data for eight (8) CDD landfills in Maine and determined that in general, there is not an appreciable amount of arsenic detected in groundwater at monitored CDD landfill facilities in Maine. Monitoring results indicated that the MCL for arsenic (0.010 mg/L) was consistently exceeded at only two (2) out of twenty eight (28) monitoring wells. Since the beginning of 2003 most monitoring locations did not detect arsenic.

¹⁵ Graham Environmental Consulting, Wood Preserving Chemicals in California Landfill Leachate, Western Wood Preservers Institute, Vancouver, Washington, March 31, 2004.

Each of these landfills is expected to contain waste CCA-treated wood based on past disposal practices. However, the absence of arsenic in these monitoring wells suggests that the quantity of arsenic leached from CCA-treated wood is not sufficient to provide detectable concentrations in groundwater. This may be related to the small volume of CCA-treated wood disposed at the landfills. The presence of mineral oxides in the aquifer matrix may also attenuate any arsenic that is released.

Research suggests, however, that leachate produced by even well operated unlined CDD landfills will impact underlying groundwater¹⁶. This is supported by groundwater monitoring data from eight (8) CDD landfills in the state of Maine. More than half of the monitoring wells at these facilities showed a recognizable groundwater impact. Increased levels of sulfate (SO₄), bicarbonate (HCO₃), calcium (Ca), and to a lesser extent chloride (Cl) generally characterized these impacts. The source of these impacts are related to commonly disposed CDD materials including concrete, gypsum wallboard, wood, and ash from brush burn piles.

Oxygen levels are depleted at some locations where water quality is highly degraded suggesting the onset of reducing conditions in the aquifer. However, even at these locations arsenic levels remain low. This suggests the CDD landfills reviewed have not produced reducing conditions sufficient to cause the dissolution of mineral oxides and release of naturally occurring arsenic into the groundwater. Alternately, naturally occurring arsenic may not be available at these locations.

The results of groundwater monitoring at the facilities reviewed does not support a prohibition on the continued disposal of waste CCA-treated wood in unlined CDD landfills at this time. This conclusion is based on the assumption that the future rate of CCA-treated wood disposal is comparable to current disposal rates and that current groundwater quality is reflective of current disposal rates.

IV. Conclusions and Recommendations

Based upon review of literature and research, assessment of existing environmental data, evaluation of the current regulatory structure and discussions with interested parties, the Department concludes and/or recommends the following:

¹⁶ Townsend, Timothy, Yong-Chul Jang, William Weber, Continued Research into the Characteristics of Leachate from Construction and Demolition Waste Landfills, State University System of Florida, Florida Center for Solid and Hazardous Waste Management, Report #00-04, July 2000.

- Disposal of arsenic treated waste wood in unlined construction and demolition debris landfills should be allowed to continue at present since the data does not suggest that arsenic at these facilities is posing an unacceptable environmental risk.
- The Department will further evaluate the question of whether the siting and construction of new unlined CDD landfills should be prohibited, since the data indicates that these landfills do cause ground water impacts unrelated to arsenic.
- The Department should encourage the disposal of arsenic-treated waste wood in lined landfills rather than in unlined landfills as a precautionary measure.
- The current regulatory standards in place and the air emissions control technologies being employed at Maine's municipal solid waste combustion facilities provide adequate safeguards with respect to potential arsenic emissions from the small volume of CCA-treated waste wood expected to be received at these facilities.
- The Department should establish a regulatory standard for the amount of arsenic-treated wood allowable in wood waste fuels.
- The Department should specifically require, by rule, the separation and segregation of CCA-treated waste wood at waste handling facilities if the waste wood stream generally is destined for use as fuel.
- The Department should work with the State Planning Office to refine solid waste reporting requirements in order to gather specific information concerning the generation and disposal of CCA-treated waste wood.
- The Department should continue to ensure, through licensing and compliance measures, that mulch and compost produced in Maine is not contaminated with CCA-treated waste wood.

APPENDICES

➤ **Appendix A**

PL 2003 Chapter 457 – An Act to Protect Public Health by Reducing Human Exposure to Arsenic

➤ **Appendix B**

List of Invited Participants – Advisory Group Concerning the Handling and Disposal of Arsenic Treated Waste Wood

➤ **Appendix C**

Report to the Joint Standing Committee on Natural Resources, January 2004 – “A Market Evaluation of the Sale of Arsenic-treated Wood in Maine”

APPENDIX A

APPROVED

CHAPTER

JUN 13 03

457

BY GOVERNOR

PUBLIC LAW

STATE OF MAINE

IN THE YEAR OF OUR LORD
TWO THOUSAND AND THREE

H.P. 963 - L.D. 1309

An Act To Protect Public Health by Reducing Human Exposure
to Arsenic

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 33 MRSA §173-A is enacted to read:

§173-A. Information provided

Beginning January 1, 2004, unless the transaction is exempt under section 172, the seller of residential real property shall provide to the purchaser information developed by the Director of the Bureau of Health within the Department of Human Services regarding what homeowners should know about arsenic in private water supplies and arsenic in treated wood. Copies of this information must be provided to sellers at cost.

Sec. 2. 38 MRSA c.16-C is enacted to read:

CHAPTER 16-C

ARSENIC-TREATED WOOD PRODUCTS

§1681. Definitions

As used in this chapter, unless the context otherwise indicates, "arsenic-treated wood" means lumber, timber, piles, poles, posts, plywood, shakes, shingles or other wood or forest

products intended for outdoor use that have been pressure treated to reduce decay with a wood preservative containing inorganic arsenic or inorganic arsenic compounds, including, but not limited to, chromated copper arsenate, commonly referred to as "CCA," or similar arsenic-based wood-preserving chemical mixtures.

§1682. Restriction on sale

The following restrictions apply to the sale of arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation order issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003.

1. Purchase of arsenic-treated wood by retail business. Retail businesses that sell wood for residential use may not purchase arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation order issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003.

2. Sale of arsenic-treated wood. Beginning April 1, 2004, a person may not sell or offer for sale arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation order issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003. This prohibition does not apply to structures already built containing arsenic-treated wood that are included as part of a residential real estate transaction.

§1683. Statute not admissible in evidence

This chapter may not be admitted in evidence or offered as an exhibit for any purpose in any civil trial against any wholesaler, retailer or installer of arsenic-treated wood. This section does not apply in cases of enforcement actions brought by the State.

Sec. 3. Disposal plan. By January 1, 2005, the Department of Environmental Protection shall submit to the joint standing committee of the Legislature having jurisdiction over natural resources matters a plan for the safe management of arsenic-treated wood waste. The plan must be developed in consultation with interested parties. The plan must include, but is not limited to, recommendations regarding:

1. The separation and segregation of arsenic-treated wood at solid waste handling facilities;

2. Restrictions on the combustion of arsenic-treated wood at incineration facilities, biomass boilers and other boilers; and

3. Restrictions on the disposal of arsenic-treated wood at unlined landfills.

For purposes of this section, "arsenic-treated wood" has the same meaning as in the Maine Revised Statutes, Title 38, section 1681.

Sec. 4. Report on reducing arsenic exposure and ensuring safe drinking water from private wells. The Department of Human Services, Bureau of Health shall submit a report no later than October 1, 2004 to the Joint Standing Committee on Natural Resources and the Joint Standing Committee on Health and Human Services after consultation with a diverse group of interested parties. The report must contain an assessment of the need for a comprehensive safe drinking water program for private wells to address arsenic and other contaminants of human health concern and recommendations to address identified needs.

Sec. 5. Report on arsenic and real estate transactions. The Real Estate Commission, under the Maine Revised Statutes, Title 32, chapter 114, subchapter 2, shall submit a report no later than October 1, 2004 to the Joint Standing Committee on Natural Resources and the Joint Standing Committee on Business, Research and Economic Development after consultation with the Department of Human Services, Bureau of Health and other interested persons. The report must contain a description of efforts within the real estate industry to increase awareness among real estate licensees and buyers and sellers of residential real estate of the hazards of arsenic in water supplies and treated wood, the need to test for arsenic in private water supplies and the need to identify and to regularly coat with a sealant arsenic-treated wood structures, including decks, entryways and play sets. The efforts may include, but are not limited to, information directly used by home sellers and buyers, such as modifications to purchase and sales agreements, modifications to hazardous materials disclosures and educational brochures or other written information.

Sec. 6. Report on arsenic-treated wood uses. The Department of Environmental Protection shall submit a report no later than January 1, 2004 to the Joint Standing Committee on Natural Resources that contains a market evaluation of the sale of "arsenic-treated wood," as defined in the Maine Revised Statutes, Title 38, section 1681, in the State and the remaining uses of arsenic-treated wood that are still allowed in the State. For marine and other direct water contact uses of

arsenic-treated wood, the report must include information on the market availability of alternatives to wood treated with a preservative containing added copper. The joint standing committee may report out legislation to the Second Regular Session of the 121st Legislature to restrict the sale of arsenic-treated wood for all remaining uses.

APPENDIX B

ARSENIC-TREATED WASTE WOOD ADVISORY GROUP
(2004)

NAME	AFFILIATION
Jeff Austin	Maine Municipal Association
Mike Belliveau	Environmental Health Strategy Center
Hal Bumbly	Maine Wood Treaters, Inc.
Patrick Coughlin	St. Germain & Associates
Mark Draper	Tri-Community Sanitary Landfill
Eric Dumond	Boralex, Inc.
Diana Graham	Graham Environmental Consulting
Jim Guerra	Tri-County Solid Waste Management Association
Dana Humphrey	University of Maine, Dept. of Civil & Environmental Engineering
Gary Leighton	Mid Coast Solid Waste Corporation
Allan Lord	Central Penobscot Solid Waste Facility
Alison McCrady	Norway-Paris Solid Waste Corporation
Jeff McGown	Waste Management of Maine, Inc.
Don Meagher	Casella Waste Systems, Inc.
Jeff Miller	Treated Wood Council
Bill Murdock	Thompson Enterprises
Bill Parker	Boralex, Inc.
Peter Russell	P. R. Russell, Inc.
Paula Clark	Maine DEP, BRWM
Marc Cone	Maine DEP, BAQ
Clif Eliason	Maine DEP
Jim Glasgow	Maine DEP
Richard Heath	Maine DEP
Mark Roberts	Maine DEP

APPENDIX C

A Market Evaluation of the Sale of Arsenic-treated Wood in Maine

Prepared for the Maine Department of Environmental Protection
By
Environmental Management and
Planning Decisions

December 2003

A Market Evaluation of the Sale of Arsenic-treated Wood in Maine

I Introduction:

Environmental Management and Planning Decisions teamed to study and report on the prevalence and use of pressure-treated wood in Maine for the Maine Department of Environmental Protection. The results of our study show that about 55 million board feet of pressure-treated wood will be sold in Maine in the next year. In addition, the shift from **Chromated Copper Arsenate** ("CCA") to **Alkaline Copper Quaternary** ("ACQ" or "Quat"), the most widely used alternative wood treatment in Maine, does not appear to have caused a decrease in the sale of pressure treated wood. Finally, there is little CCA treated lumber left for sale in the state.

The pressure-treated wood industry and the US Environmental Protection Agency reached an agreement that lumber treatment facilities would no longer use arsenic in treating wood for uses where consumers might come in regular contact with the product. The cancellation notice was posted in the Federal Register on April 9, 2003, about the time the Maine legislature began work on its own legislation to ban CCA- treated wood from most residential applications. The EPA response to the industry's request is in the appendix to this report.

By the end of the first session of the 121st legislature, the Maine Legislature, in Chapter 457 of the Public Laws of 2003, established restrictions on the sale of arsenic-treated wood for residential uses in Maine (see appendix). Specifically the law says:

- 1. Purchase of arsenic-treated wood by retail business.** Retail businesses that sell wood for residential use may not purchase arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation order issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003.
- 2. Sale of arsenic-treated wood.** Beginning April 1, 2004, a person may not sell or offer for sale arsenic-treated wood or wood products for residential uses that are not included as permitted uses in a notice of cancellation order issued by the United States Environmental Protection Agency as published in the Federal Register on April 9, 2003. This prohibition does not apply to structures already built containing arsenic-treated wood that are included as part of a residential real estate transaction.
- 3. Report on arsenic-treated wood uses.** The Department of Environmental Protection shall submit a report no later than January 1, 2004 to the Joint Standing Committee on Natural Resources that contains a market evaluation of the sale of "arsenic-treated wood"... For marine and other direct water contact uses of arsenic-treated wood, the report must include information on the market availability of alternatives to wood treated with a preservative containing added copper (see appendix).

In light of the bill and its restrictions on the sale of arsenic-treated wood for residential uses as well as the requirement of a disposal plan, the Maine Department of Environmental Protection needed to:

- 1) Determine how much CCA treated wood was being sold in Maine each year;
- 2) Determine how broadly treated wood containing added copper but no arsenic would be marketed (using compounds other than CCA); and,
- 3) Learn more about alternatives to pressure-treated wood such as the various recycled plastic wood-like products on the market.

II Background

Why Pressure-Treat Wood? Unprotected wooden structures placed out-of-doors begin to rot almost immediately and show clear signs of degradation within a year or two. Decks, picnic tables and docks placed on or near the ground or water or in damp forested situations, as are found near camps or cottages in Maine, may biodegrade to the point of uselessness in a matter of five to seven years. In ground applications, the wood that makes up the foot and a half above and below ground level is the wood that will be most seriously attacked by microorganisms and insects.

Shipworms and other marine invertebrates invade wooden cribwork in a marine environment within a few months. In one example, noted during this study, a wooden lobster trap with untreated wood slats on a treated wood frame was destroyed in six months. The untreated oak was attacked and consumed by shipworms while the treated oaken frame was untouched.

Treated wood lasts considerably longer. According to the American Wood Preservers Association (AWPA), treated wood will last about eight times longer than untreated wood in the same location. In some cases, treated wood lasts as much as sixty¹ years or more, depending on the microenvironment into which it is placed. Decks, stairs, tables and other structures, even if unpainted, easily last ten years with limited degradation, and much longer if stained or otherwise surface treated.

How is wood treated?² Maine has one wood preserver, The Maine Wood Treaters, Inc., located in Mechanic Falls. Owned and operated by Mr. Harold Bumby, the firm has been treating wood in Maine for more than twenty years. The facility treats a significant portion of all the pressure-treated wood sold in Maine.

The wood treatment process involves large "tubes" about six feet in diameter and thirty-five to fifty feet long. Wood to be treated is stacked and chained on trolleys or steel wheeled carts and rolled into the tube. When the tube is full the heavy door is closed and sealed. Next the operator draws a vacuum on the tube, the carts and the wood.

¹ Mr. Harold Bumby, President, The Maine Wood Treaters, Inc., personal communication.

² Personal communication during a site visit to The Maine Wood Treaters, Inc.

The air is extracted at more than an atmosphere of vacuum. When the proper negative pressure is reached, pesticide is flooded into the tube, which now becomes a tank filled with wood and pesticide.

Next, the pressure gradient is reversed and the pumping system, applies pressure to the tank, forcing waterborne pesticide deep into the wood tissue. Held at more than one hundred and fifty pounds per square inch of pressure (about ten atmospheres), the wood is left to soak up the pesticide for hours. Different types of wood require different soaking times.

After the wood has stayed in the treatment tube for the prescribed time, the pesticide is pumped from the tube and back into the storage tank. The carts of newly treated wood are pulled from the treatment tube and dried. Once thoroughly dry, the wood is removed from the carts and stacked out-of-doors to await shipment.

What pesticides are used?³ Arsenic-containing pesticides, the so-called arsenicals, such as CCA and ACZA are waterborne pesticides used to treat wood. CCA, Chromated Copper Arsenate, contains Copper, Chromium and Arsenic. It has been used to treat wood since the 1940s. Since the 1970s, it has been used to treat the majority of wood used in residential settings. ACZA is Ammoniacal Copper Zinc Arsenate, and is the other commonly used arsenical pesticide.

Alkaline copper quaternary (ACQ), nicknamed "Quat" is the compound used by The Maine Wood Treaters to produce their product, "Nature's Wood."®. The USEPA explains, "ACQ formulations combine a bivalent copper complex and a quaternary ammonium compound in a 2:1 ratio. The copper complex may be dissolved in either ethanolamine or ammonia. Carbon dioxide (CO₂) is added to the formulation to improve stability and to aid in solubilization of the copper."

The EPA says replacing CCA with ACQ, as has been done in Maine, is one of the most dramatic pollution prevention advancements in recent history, because more than 90 percent of the 44 million pounds of arsenic used in the U.S. each year is used to make CCA. Replacing CCA with ACQ will virtually eliminate the use of arsenic in the United States they say. In addition, ACQ use will eliminate the use of million pounds of hexavalent chromium. Further, ACQ avoids the potential risks associated with the production, transportation, use, and disposal of the arsenic and hexavalent chromium contained in CCA wood preservatives and CCA-treated wood. In fact, ACQ does not generate any RCRA hazardous waste from production and treating facilities. Finally, the disposal issues associated with CCA-treated wood and ash residues associated with the burning of treated wood will also be avoided.

A second non-arsenic wood preservative is called CBA. According to the Green Resource Center, a non-profit green building project in Berkley, California, CBA is a copper-based preservative with an organic fungicide. The treated wood is a dark honey

³ USEPA, *Residential Uses of CCA-Treated Wood and Response to Requests to Cancel Certain Chromated Copper Arsenate (CCA) Wood Preservative Products and Amendments to Terminate Certain Uses of Other CCA Products*

brown color and turns a silver-gray after it weathers. The brown color can be restored by lightly sanding the outer layer. CBA is clean to the touch, not corrosive to metal hardware, and extends the life of wood. It provides long-term resistance to termites and fungal decay in ground contact and aboveground applications. CBA treated wood can be used for most applications where CCA is used, such as decks, walkways, gazebos, picnic tables, play structures, etc. It can also be used in fresh water applications; however it is not approved for saltwater use, round structural poles, or wood foundations.

Other wood preservatives that do not contain arsenic include:

- Acid Copper Chromate (ACC), used for decades for treatment of wood used in cooling towers.
- Ammoniacal Copper Citrate (CC), a recently developed wood preservative that utilizes copper oxide as the fungicide and insecticide, and citric acid to aid in the distribution of copper within the wood structure.
- Copper Azole which is another name for CBA and is listed to avoid confusion.
- Copper Dimethyldithiocarbamate (CDDC), a reaction product formed within the wood after treatment with two different treating solutions. It contains copper and sulfur compounds. Exposure data indicates that CDDC treatment is effective in protecting wood against attack by decay fungi and insects; although a topical preservative finish may be needed to prevent discoloration by mold and mildew.
- Borate Preservatives are sodium salts, such as sodium octaborate, sodium tetraborate, and sodium pentaborate, that are dissolved in water. Borate preservatives have received a lot of attention in recent years because they are inexpensive and have low mammalian toxicity.

III Data Gathering Methodology

Data gathering. Dozens of calls were made to lumber dealers, home improvement stores and other outlets of lumber and wood products all across the state. From those calls, it was determined that on the effective date of the law, September 13, 2003, most lumber dealers in Maine stopped purchasing CCA-treated wood and stopped having CCA lumber shipped from stockpiles in other states into Maine. In most of those conversations the lumber dealer explained that they had already shifted their purchasing to ACQ or some other non arsenic-containing lumber. In December of 2003 there was still a small amount of CCA treated wood for sale in Maine, however, and such sales are permitted under the law until April 1, 2004.

Lumber dealers may purchase CCA wood to fill requests for material to build specific kinds of projects. In most cases they say they will require a written request that specifies the use before filling the order. As a result, even though the use of CCA wood is allowed for certain non residential projects, obtaining it will be difficult and it is likely that for the most part, ACQ treated wood will replace CCA treated wood.

The Maine Wood Treaters, Inc. shifted most of its production to ACQ in 2002, as it reported to the legislature last spring. As of October 2003, only a single production tube, of the three at the facility, was being used to make CCA wood for sale outside of

Maine. The other production trains have been changed to ACQ and the remaining CCA tube will be changed soon.

Determining how much pressure-treated wood is sold in Maine is difficult for a number of reasons. Retail lumber dealers are not interested in telling their competitors how much of what type of lumber they are selling, and are therefore unwilling to submit those numbers to a state agency or to a researcher. Short of a complete investigation into purchases and sales over the year, an exercise none of the dealers were willing to undertake for this effort, the answers to our questions were often generalized and estimated in "truckload" units, rather than board feet. (1 board foot = a piece of wood 1 foot tall X 1 foot wide X 1 inch thick.)

Under Maine law, a dual-axle, fully loaded tractor and trailer cannot weigh more than 80,000 lbs (in some cases a 10% overload is allowed for some wood products). However, since the tractor and trailer weigh about 30,000 lbs (15 tons), each dual-axle truck carries about 25 tons of wood⁴. Treated wood weighs significantly more than untreated wood. A truckload of treated wood contains about 15,000 board feet (BF) while a truckload of dry, untreated white pine contains about 20,000 BF/Truckload, or 5,000 BF less.

Truck size is an issue because often the best information that could be obtained in telephone calls around the state was a statement like this: "We use about 4 or 5 truckloads of wood a year with about 20,000 BF per truckload." Many dealers were contacted, from Aroostook County to York County, and many different estimates were collected but they were always estimates, except with the largest dealers.

Methodology It became clear, after a day or two of phone calls, that the data we were collecting from lumber dealers was inexact at best. We responded to this difficulty by broadening our information gathering to four very different sources of information. Then, by analyzing the data from these disparate places, we determined a range of values for the volume of treated wood sold in the state. The values corroborated each other so we feel we have made a fair determination of the volume of treated wood sold in Maine in the past year.

The four methods used to gather the data were:

1. Telephone interviews with dozens of retail lumber dealers;
2. Meeting and discussions with wood treaters, especially The Maine Wood Treaters, Inc. in Mechanic Falls;
3. National data from the American Wood Preservers Association; and
4. A comparison of lumber sales data among large retail operations.

Individually, none of these methods would be a particularly good source of information. Each method has problems and none yields an accurate number by itself.

⁴ Lt. Bruce Dow, Maine State Police, retired. Past Director of the State Police Traffic Division that includes the Commercial Vehicle Enforcement unit which regulates trucks on Maine's roads and highways.

By using all four sources, however, we can approximate the amount of pressure treated wood sold in the state in the last year, and use that number to project what will be sold in the future. As a result, however, it is important to be clear that the amounts of treated wood expressed in this report are estimates, not hard and fast numbers, but we feel they are as accurate as can be derived under the circumstances.

IV Sales/Volume Data

Lumber Dealer Data Lumber dealers, and the Maine Retail Lumber Dealers Association, were as helpful as they could be with this report. There are seventy-eight yards in Maine, of various sizes. In collecting information for this report, we discovered that all the lumber dealers we talked with were concerned that their sales data not appear in a state report, thus giving their competitors information that might harm them. Therefore, we agreed not to provide sales data about individual dealers in the report. As a result, we have aggregated the data and not named the dealers, and we have agreed not to release any data that could be used to relate dealer sales to individual dealers.

After interviewing each of the five largest wood and lumber dealers in Maine, it can be said that each of the large dealers in Maine handle about 3.5 to 4 million board feet a year of treated wood. Each of the large dealers in Maine has multiple store locations across the state. The interviews also show that smaller dealers handle between 250,000 and 750,000 board feet per year and are found in all the larger towns in Maine, from Caribou to Saco. Finally, the interviews indicate that almost all the CCA-treated lumber in Maine has been sold already and it is clear that all of the residential CCA-treated wood not included by EPA as a permitted use will be gone well before the April 1, 2004 sales deadline.

As a result, it is reasonable to say that after April 1, 2004, all the treated wood to be used for residential uses is likely to be of the high copper, non-arsenic kind that has supplanted CCA across the state. In fact, except by special order, it is unlikely that CCA will be available even for commercial users in Maine, as most dealers are not going to stock any CCA. Their concern is that obtaining proof that the treated wood will be used in non-residential settings will be impossible, leaving them liable to prosecution or to a lawsuit.

With five large dealers, each one selling about 4 million board feet of treated wood each year, a total of about 20MM board feet a year will be sold by them in Maine next year. If each of the remaining 73 lumber stores, yards and outlets sells about 500,000 board feet, an additional 36.5MM board feet will be sold in Maine.

Using this method of estimation, Maine consumes 56.5 million board feet of pressure-treated wood a year.

Data from Wood Treaters Like lumber dealers, wood treaters are very protective of their sales data. As a result, no names will be used in this section. In talking with wood treaters we have learned that between 52 million and 59 million BF of treated wood will likely be sold in Maine in the coming year, based on last year's sales.

One treater also said that the sales trend is upward and he is not concerned that the legislation has had a chilling effect on his business.

There is a single wood treater in Maine, the Maine Wood Treaters, in Mechanic Falls. That company makes Nature's Wood ® and markets the lion's share of its product in Maine. However, firms in Rhode Island, Massachusetts and New Hampshire also sell treated wood in Maine through the so-called "big box" stores as well as some smaller dealers.

Therefore, using this method of estimation, Maine consumes 52-59 million board feet of pressure-treated wood every year.

American Wood Preserver's Association Data In 1997, James T. Micklewright⁵ reviewed the volume of treated wood produced in the United States for the American Wood-Preservers' Association (AWPA). His twenty-two-page report entitled *Wood Preservation Statistics 1997* is available from the AWPA. The data in the report, while five years old, gives a reference point in this attempt to determine the amount of treated wood used in Maine. Micklewright is a statistician who has been retained several times by the AWPA over the last twenty years to determine how much wood is treated in the United States. The data in the report is national in nature and tells us 3.2 billion board feet (581.4 million cubic feet⁶) of lumber and timbers were treated with waterborne chemicals in the United States that year.

Of that total, the amount treated in the Northeast Region (Delaware, Maryland, Virginia, Pennsylvania, New York, New Jersey and New England) was approximately 274,725,000 board feet (49,950,000 cubic feet). That is about one tenth of the total produced in the US. Since this is an estimate of the amount produced, and not the amount sold, its usefulness is to show that in the northeast we produce far less treated lumber than in the rest of the nation.

Total production of wood treated with waterborne chemicals in board feet, according to the AWPA report for 1997⁷:

Northeast	49,950,000 CF
North Central	86,058,000 CF
Southeast	189,485,000 CF
South Central	164,000,000 CF
Rocky Mountain	17,601,000 CF
<u>Pacific Coast</u>	<u>74,205,000 CF</u>
Total	581,382,000 CF

Based on sales and treatment data, Maine uses about one fifth of the total production in the northeast, which, given the size of the state and the number of camps

⁵ Personal communication with Micklewright indicated that Northeast in the report extended from West Virginia to Maine and included Pennsylvania and New York.

⁶ 1 Cubic Foot equals 5.5 board feet of wood

⁷ Table from *Wood Preservation Statistics 1997*, James T. Micklewright for the American Wood-Preservers' Association

and waterfront properties in Maine, is a reasonable assumption. It is also logical that we produce less treated lumber in the northeast since our temperature regime and the nature of our pests are far less conducive to causing wood to rot or be consumed by insects than in the warmer and wetter areas of the nation, such as the southeast.

Therefore, using this method of estimation, Maine consumed about 55 million board feet of pressure-treated wood in 1997. This estimate is consistent with data obtained from the wood treaters.

Lumber Sales Data Sales data from the five largest firms selling treated wood in Maine shows that, on average, in 2002, their sales of lumber accounted for about 53% of the total lumber sales in Maine. One of the five explained that between 15 and 20% of their sales were in treated wood, and that trend continued after the stock of CCA had been sold and only ACQ was available; even though ACQ is somewhat more expensive.

This information is different from the telephone interview data because it comes from statewide sales tax information as opposed to individual telephone poll responses. In other words, it looks at the same sales, but as collected at the state level, rather than from the individual store level. Using this method of estimation, Maine consumes nearly 40 million board feet of pressure-treated wood every year, which while not the same as the amounts estimated in other ways, is close enough to verify that the other methods yield good estimates.

It is not possible at this time, based on the information available, to make a clear statement about the future sales of CCA treated wood in Maine, no one knows. From conversations with lumber dealers here in Maine as well as managers for the Big Box stores here and at their headquarters, it will not be a large volume.

V Alternative Products and Products for Marine and Water Contact Use

Marine use of wood for docks and wharves is one of the remaining uses allowed in the EPA agreement because wood used in the marine environment must be impervious to shipworms and many other marine organisms that consume untreated wood at a remarkable rate. As a result, lumber dealers along the coast may continue to stock some large dimension CCA treated lumber, of the 8" X 8" or larger sizes, in lengths suitable for cribbing, and dock work. In talking with those dealers, however, we determined that they will likely require the purchaser to specify what they intend to construct from the timbers before they are sold, to prevent their use in a manner not allowed under the law. In addition, since there is not a great deal of such construction, the CCA timbers will probably be special-ordered from out of state. As a result, there is likely to be little CCA-treated dimensions stock kept in state, even for marine uses, and it is fair to assume over time that less will be used just because of the problems associated with obtaining it.

There are no shipworms in lakes and rivers and lakeside wharves and docks must be removed in the winter lest the ice destroy them. Timbers used at the turn of the century are still in place along the Kennebec River in Hallowell, for example, where they

were used in wharves and docks. Similarly, the lakes of Maine all have century old logs of wood on their bottoms; wood that if raised and dried can be used today in finish carpentry it is so well preserved. In short, then, there is little need to use pressure-treated wood in fresh water environments in Maine.

Alternative types of lumber exist that are inherently more rot resistant than spruce, fir and pine. Woods like white oak and cedar, for example, degrade much more slowly than pine or spruce. They are more expensive, however, and are not likely to be purchased in the same volumes as pressure-treated wood for the same purposes. In addition, the marine use of cedar is restricted by its relatively low strength.

The other alternatives to treated wood are various wood and plastic or pure plastic products. The wood/plastic alternatives, while useful, do not have the same strength as treated wood and so cannot be used in foundation work or for carrying timbers. For the most part these alternatives are made of formed shavings and sawdust which is coated in either virgin or recycled plastic and are best used in decking.

Many of the lumber dealers sell alternative wood-like products, but generally in small amounts. For example, one medium sized yard reported sales of about a half a million board feet of treated lumber compared to 45,000 board feet of alternative lumber.

Not only is alternative wood less useful structurally, but dealers also expressed concern that if the plastic cover on the alternative timber were broken, the wood interior would rot.

IV Conclusions

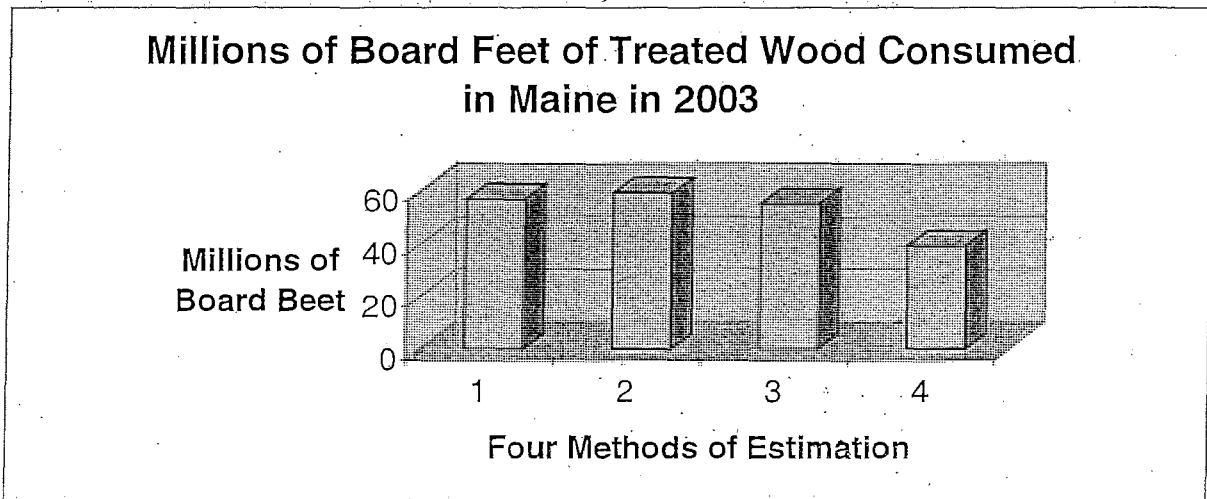
It is very difficult to estimate the total amount of pressure-treated wood produced in Maine and imported for sale in Maine. The barriers to gathering this information are primarily based on the reluctance of lumberyards and producers of treated wood to allow data from their sales or production to be used in a report to the state. Nevertheless, we were able, by using several sources of information; to come to some broadly accepted numbers for the total amount of treated wood sold, and therefore assumed to be used in Maine. The four methods we used would not be reliable if used alone. However, by using all four methods, we believe that they reinforce each other in arriving at the 55 million board feet estimate.

Alternative lumber resources such as cedar and white oak are probably too expensive for general use in Maine. The market for cedar may increase in response to the law removing CCA from the market and the subsequent increase in the price of pressure-treated lumber. Since white oak must be imported from outside the state, and has many high value uses, it is not likely to be used in Maine in place of pressure-treated wood.

Since LD 1309, Chapter 457 of the Public Laws of Maine, became effective, practically all of the CCA-treated wood that can be used for residential construction has been sold. Moreover, except for special orders, only a few of the coastal lumberyards

will be carrying CCA lumber at all as it will only be used in construction along the ocean. It isn't possible to provide a valid estimate of the volume that will be used for marine structures in the present circumstances.

After evaluating all the information collected using the four methods outlined in this report, our summary estimate is that between 55 million and 60 million board feet of treated wood was sold in Maine in 2003. Based on that estimate, and further discussions with many of the interviewees, somewhat more pressure-treated wood is expected to be sold in 2004 as the economy strengthens.



Column 1 = Lumber Dealer data
Column 3 = AWWA* data

Column 2 = Wood Treater data
Column 4 = Data from Total Lumber Sales

Finally, alternative lumber products, while useful in some forms of construction, are generally not good for uses that are structural in nature and may only amount to a tenth of the volume of treated wood being sold in the market. In addition, the wood chips used as a bulking agent in these "plastic wood" substitutes is often treated with copper compounds similar to those used in pressure-treating wood.⁸

⁸ AWWA – American Wood-Preserver's Association

APPENDIX A

APPROVED

CHAPTER

JUN 13 '03

457

BY GOVERNOR

PUBLIC LAW

STATE OF MAINE

—
IN THE YEAR OF OUR LORD
TWO THOUSAND AND THREE
—

H.P. 963 - L.D. 1309

**An Act To Protect Public Health by Reducing Human Exposure
to Arsenic**

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 33 MRSA §173-A is enacted to read:

§173-A. Information provided

Beginning January 1, 2004, unless the transaction is exempt under section 172, the seller of residential real property shall provide to the purchaser information developed by the Director of the Bureau of Health within the Department of Human Services regarding what homeowners should know about arsenic in private water supplies and arsenic in treated wood. Copies of this information must be provided to sellers at cost.

Sec. 2. 38 MRSA c.16-C is enacted to read:

CHAPTER 16-C

ARSENIC-TREATED WOOD PRODUCTS

§1681. Definitions

As used in this chapter, unless the context otherwise indicates, "arsenic-treated wood" means lumber, timber, piles, poles, posts, plywood, shakes, shingles or other wood or forest

2. Restrictions on the combustion of arsenic-treated wood at incineration facilities, biomass boilers and other boilers; and

3. Restrictions on the disposal of arsenic-treated wood at unlined landfills.

For purposes of this section, "arsenic-treated wood" has the same meaning as in the Maine Revised Statutes, Title 38, section 1681.

Sec. 4. Report on reducing arsenic exposure and ensuring safe drinking water from private wells. The Department of Human Services, Bureau of Health shall submit a report no later than October 1, 2004 to the Joint Standing Committee on Natural Resources and the Joint Standing Committee on Health and Human Services after consultation with a diverse group of interested parties. The report must contain an assessment of the need for a comprehensive safe drinking water program for private wells to address arsenic and other contaminants of human health concern and recommendations to address identified needs.

Sec. 5. Report on arsenic and real estate transactions. The Real Estate Commission, under the Maine Revised Statutes, Title 32, chapter 114, subchapter 2, shall submit a report no later than October 1, 2004 to the Joint Standing Committee on Natural Resources and the Joint Standing Committee on Business, Research and Economic Development after consultation with the Department of Human Services, Bureau of Health and other interested persons. The report must contain a description of efforts within the real estate industry to increase awareness among real estate licensees and buyers and sellers of residential real estate of the hazards of arsenic in water supplies and treated wood, the need to test for arsenic in private water supplies and the need to identify and to regularly coat with a sealant arsenic-treated wood structures, including decks, entryways and play sets. The efforts may include, but are not limited to, information directly used by home sellers and buyers, such as modifications to purchase and sales agreements, modifications to hazardous materials disclosures and educational brochures or other written information.

Sec. 6. Report on arsenic-treated wood uses. The Department of Environmental Protection shall submit a report no later than January 1, 2004 to the Joint Standing Committee on Natural Resources that contains a market evaluation of the sale of "arsenic-treated wood," as defined in the Maine Revised Statutes, Title 38, section 1681, in the State and the remaining uses of arsenic-treated wood that are still allowed in the State. For marine and other direct water contact uses of

APPENDIX B

Office of Ground Water and Drinking Water (M/C 4601M), 1200 Pennsylvania Avenue, NW., Washington, DC 20460

SUPPLEMENTARY INFORMATION: The Council encourages the public's input and will allocate one hour during the meeting for this purpose. Oral statements will be limited to five minutes, and it is preferred that only one person present the statement on behalf of a group or organization. To ensure adequate time for public involvement, individuals or organizations interested in presenting an oral statement should notify the Council's Designated Federal Officer by telephone at (202) 564-3791, no later than May 2, 2003. Any person who wishes to file a written statement can do so before or after a Council meeting. Written statements received no later than May 2, 2003 will be distributed to all members of the Council before any final discussion or vote is completed. Any statements received after the meeting will become part of the permanent meeting file and will be forwarded to the Council members for their information.

Any person needing special accommodations at this meeting, including wheelchair access, please contact Brenda Johnson (see **FOR FURTHER INFORMATION CONTACT** section). Arrangements need to be made at least five business days before the meeting so that appropriate special accommodations can be made.

Dated: April 2, 2003.

Cynthia C. Dougherty,
Director, Office of Ground Water and Drinking Water.

[FR Doc. 03-8669 Filed 4-8-03; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

[OPP-2003-0104; FRL-7301-2]

Response to Requests to Cancel Certain Chromated Copper Arsenate (CCA) Wood Preservative Products and Amendments to Terminate Certain Uses of other CCA Products

AGENCY: Environmental Protection Agency (EPA)

ACTION: Notice of a Cancellation Order.

SUMMARY: This notice announces that a cancellation order was signed on March 17, 2003, in response to the use terminations and cancellations voluntarily requested by the registrants of wood preservative pesticide products containing Chromated Copper Arsenate (CCA) pursuant to section 6(f)(1) of the

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. In addition to stating the Agency's response to the requests for cancellation of certain CCA products and amendments to terminate certain uses of other CCA products, this notice also addresses the considerable number of comments received in response to the Agency's requests for public comments on the above stated requests. In the cancellation order, the Agency granted certain of the aforementioned requests and did not take any action regarding certain other elements of the requests. Any sale, distribution, or use of affected products listed in this notice will only be permitted if such distribution, sale, or use is consistent with terms and conditions set forth in the cancellation order.

DATES: The effective dates of cancellation are as follows: (1) For affected product registrations—March 17, 2003 (2) For affected product registrations amended to delete terminated uses—May 16, 2003.

FOR FURTHER INFORMATION CONTACT: By mail: Bonaventure Akinlosotu, Office of Pesticide Programs (7510C), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460. Office location for commercial courier delivery, telephone number and e-mail address: Rm. 308, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA 22202, (703) 605-0653; e-mail: akinlosotu.bonaventure@epa.gov.

SUPPLEMENTARY INFORMATION: This announcement consists of five parts. The first part contains general information. The second part provides background, and summarizes the use terminations and product cancellations requested by the CCA product registrants. The third part summarizes the comments received in response to the Agency's request for public comments on the aforementioned registrants' requests, and provides the Agency's response to the comments. The fourth part provides a summary of the Agency's decision on the voluntary cancellation and use termination requests. The fifth part sets forth the existing stocks provisions that the Agency authorized in the cancellation order.

I. General Information

A. Does this Action Apply to Me?

This action is directed to the public in general. You may be potentially affected by this action if you manufacture, sell, distribute, or use CCA products. The Congressional Review

Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, does not apply because this action is not a rule, for purposes of 5 U.S.C. 804(3). Since other entities may also be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically.* You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at <http://www.epa.gov/>. To access this document, on the Home Page select "Laws and Regulations," "Regulations and Proposed Rules" and then look up the entry for this document under the "Federal Register—Environmental Documents." You can also go directly to the **Federal Register** listings at <http://www.epa.gov/fedrgstr/>.

2. *In person.* The Agency has established an official record for this action under docket control number OPP-2003-0104. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the Public Information and Records Integrity Branch (PIRIB), Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305-5805.

II. Background and Summary of Registrants' Request to Cancel Products and Delete Uses

On February 22, 2002, the Agency announced the receipt of requests from the registrants of wood preservative

pesticide products containing Chromated Copper Arsenate (CCA) to cancel certain CCA products and to amend the registrations to terminate certain uses of other CCA products (67 FR 8244)(FRL-6826-8). Another notice was issued (67 FR 13328, March 22, 2002)(FRL-6831-6) to extend the comment period until April 9, 2002. The requests proposed that only certain uses of CCA be allowed as of December 31, 2003. The registrants stated in their requests that their requests were being made as a result of current and projected market demand for CCA products and the availability of new

generation wood treatment products. The Agency considers these voluntary moves toward arsenic-free wood treatment products as a positive step, particularly for our nation's children. The Agency believes that reducing the potential residential exposure to a known human carcinogen is desirable. This transition affects all future residential uses of wood treated with CCA, including wood used in playground structures, decks, picnic tables, landscaping timbers, residential fencing, patios, walkways and boardwalks.

EPA received requests from four registrants (Table 1 of this unit) to cancel 2 products (Table 2 of this unit), and to amend 17 other affected end-use and manufacturing-use registrations to terminate all uses of such products (Table 3 of this unit) with the exception of the treatment of wood products that fall under the American Wood-Preservers' Association (AWPA) standards (based on the 2001 edition of the AWPA Standards) listed in the text of the requested label amendment stated below.

TABLE 1.—REGISTRANTS REQUESTING VOLUNTARY TERMINATION OF CERTAIN USES AND/OR CANCELLATION OF PRODUCTS LISTED IN TABLES 2 AND 3

EPA Company Number	Company Name and Address
003008	Osmose, Inc., 980 Ellicott Street, Buffalo, NY 14209
010465	Chemical Specialties, Inc., One Woodlawn Green, Suite 250, 200 E. Woodlawn Road, Charlotte, NC 28217
035896	Phibro-Tech, Inc., Fort Lee, NJ 07024
062190	Arch Wood Protection, Inc., 1955 Lake Park Drive, Suite 250, Smyrna, GA 30080

TABLE 2.—REGISTRATIONS WITH REQUESTS FOR CANCELLATION OF PRODUCTS

Registration Number	Product Name
62190-5	WolmanacR Concentrate 70%
62190-11	CCA Type C 50% Chromated Copper Arsenate

TABLE 3.—REGISTRATIONS WITH REQUESTS FOR AMENDMENTS TO TERMINATE CERTAIN USES

Registration Number	Product Name
End Use Products	
3008-17	K-33-C (72%) Wood Preservative
3008-21	Special K-33 Preservative
3008-34	K-33 (60%) Wood Preservative
3008-35	K-33 (40%) Type-B Wood Preservative
3008-36	K-33-C (50%) Wood Preservative
3008-42	K-33-A (50%) Wood Preservative
3008-72	Osmose Arsenic Acid 75%
10465-26	CCA Type-C Wood Preservative 50%
10465-28	CCA Type-C Wood Preservative 60%
10465-32	CSI Arsenic Acid 75%
35896-2	Wood-Last Conc. Wood Preservation AQ 50% Solution CCA-Type A
62190-2	Wolmanac Concentrate 50%
62190-8	Wolmanac Concentrate 72%
62190-14	Wolmanac Concentrate 60%

TABLE 3.—REGISTRATIONS WITH REQUESTS FOR AMENDMENTS TO TERMINATE CERTAIN USES—Continued

Registration Number	Product Name
Manufacturing Use Products	
3008-66	Arsenic Acid 75%
10465-32	CSI Arsenic Acid 75%
62190-7	Arsenic Acid 75%

For affected manufacturing-use products, the label amendments were proposed to read as follows:

Effective December 31, 2003, this product may only be used (1) for formulation of the following end-use wood preservative products: ammoniacal copper zinc arsenate (ACZA) or chromated copper arsenate (CCA) labeled in accordance with the Directions for Use shown below, or (2) by persons other than the registrant, in combination with one or more other products to make: ACZA wood preservative; or CCA wood preservative that is used in accordance with the Directions for Use shown below.

Effective December 31, 2003, this product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers Association Standards: Lumber and Timber for Salt Water Use Only (C2), Piles (C3), Poles (C4), Plywood (C9), Wood for Highway Construction (C14), Poles, Piles and Posts Used as Structural Members on Farms, and Plywood Used on Farms (C16), Wood for Marine Construction (C18), Round Poles and Posts Used in Building Construction (C23), Sawn Timber Used To Support Residential and Commercial Structures (C24), Sawn Crossarms (C25), Structural Glued Laminated Members and Laminations Before Gluing (C28), Structural Composite Lumber (C33), and Shakes and Shingles (C34). Forest products treated with this product may only be sold or distributed for uses within the AWWPA Commodity Standards under which the treatment occurred.

For affected end-use products, the label amendments were proposed to read as follows:

Effective December 31, 2003, this product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers Association Standards: Lumber and Timber for Salt Water Use Only (C2), Piles (C3), Poles (C4), Plywood (C9), Wood for Highway Construction (C14), Poles, Piles and Posts Used as Structural Members on Farms, and Plywood Used on Farms (C16), Wood for Marine Construction (C18), Round Poles and Posts Used in Building Construction (C23), Sawn Timber Used To Support Residential and Commercial Structures (C24), Sawn Crossarms (C25), Structural Glued Laminated Members and Laminations Before Gluing (C28), Structural Composite Lumber (C33), and Shakes and Shingles (C34). Forest

products treated with this product may only be sold or distributed for uses within the AWWPA Commodity Standards under which the treatment occurred.

In addition, the registrants requested that EPA allow use of the previous (unamended) labels for a period of 60 calendar days from the date on which the particular affected registrant receives EPA's approval of the amendment(s) to terminate use(s), and that EPA allow a further amendment by notification on or before December 1, 2003, to (1) delete the use directions in effect prior to these amendments, and (2) to delete the preface phrase "Effective December 31, 2003," from the amended labels such that the statement begins by reading, "This product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers' Association Standards* * *." Furthermore, the registrants stated in their letters that they would neither amend nor withdraw their requests for cancellation/use terminations before EPA acts on them. Additionally, the registrants will notify their customers of the amended labels by certified mail after EPA acts on the requests.

III. Summary of Public Comments Received and Agency Response to Comments

The Agency issued a notice of receipt of the aforementioned requests along with a solicitation for public comments (February 22, 2002), followed by another notice to extend the comment period until April 9, 2002 (March 22, 2002). Approximately 6,700 comments were submitted by the wood preservative industry, the chromium industry, the lumber industry, the agricultural industry, Kentucky and Texas State government officials, federal government officials, environmental groups, businesses and private citizens of Corpus Christi, Texas, as well as from others. Based on the nature of the concern(s) expressed, the comments were grouped into four major categories: (1) business and economic concerns

from the Agricultural Community and Wood Treatment Industry, (2) concerns with the possible adverse economic impact on the Chromium Industry and Corpus Christi, Texas, (3) concerns raised by Environmental Groups, and (4) other significant, pertinent comments.

Generally, the purpose of soliciting comments pursuant to Section 6(f) of FIFRA is to give an opportunity to comment to those individuals or businesses that would be affected by a registrant's requested action and to those who may want to apply for a registration for a pesticide for which there is a request to cancel the registration or to terminate use(s). This process helps to ensure that EPA is basing its regulatory decisions on the most up-to-date and complete information. The Agency did not specifically solicit comments for the purpose of determining if the voluntary cancellation/use termination requests were comprehensive enough or fast enough. Because these are voluntary cancellation/use termination requests, the registrants have proposed their own terms of cancellation/use termination. This type of public comment opportunity under Section 6(f) differs from the current reregistration public process in that during the reregistration public process the Agency solicits comments on a draft preliminary risk assessment and on draft risk mitigation proposals in anticipation of actions that may not be voluntary. Therefore, the scope of the public comment opportunity in the reregistration process is much broader than the scope of the opportunity in this voluntary cancellation/use termination.

Below is the summary of the comments received in response to EPA's request for public comments, along with the corresponding Agency response.

A. Business and Economic Concerns from the Agricultural Community and Wood Treating Industry

Comments. The majority of the comments received within this category specifically requested that the Agency not accept the request to cancel the use of CCA-treated lumber for agricultural

fence posts based on the lack of exposure to children and the higher cost of the alternative products. These comments were received from the wood preservative, chromium, lumber, and agricultural industries, as well as private citizens, businesses, and town officials of Corpus Christi. With respect to exposure to children, the commenters stated their belief that there is little exposure to children from agricultural fencing (as compared to a deck or playground constructed of CCA treated wood) because agricultural fences are generally far away from residences and because children typically do not play on a fence as they would a deck or playground. In addition, the commenters stated that the exclusion of CCA-treated wood for agricultural fence posts from the label would cause an adverse economical impact on the agricultural, lumber, and wood treatment industries due to the higher cost of the alternative treatment products. The commenters stated that the wood treatment plants, the agricultural industry, and the chromium industry may suffer considerable financial and market damage due to the cost of converting wood preserving plants currently treating with CCA to an alternative chemical (estimated cost ranges from \$75,000 to \$125,000), and the costs of the alternative treatment products (estimated to be 10–15% higher than CCA products at the retail level and 30% higher than CCA products for the agricultural industry). The commenters stated their belief that as a result of the above stated concerns, there will be loss of employment within the industries concerned. The Agency also received a number of comments regarding the use of CCA to treat wood used for permanent wood foundations. The comments received indicated a need to retain this important use and that it posed little opportunity for residential exposure.

Agency's response. The Agency is currently separately from this voluntary cancellation/use termination action, reviewing the exposure and risk (as well as the benefits) of all uses of CCA through its reregistration process. In light of the issues raised by commenters with regard to agricultural fence post and permanent wood foundation uses, EPA believes it is appropriate to evaluate the commenters' concerns during that review. For example, fence posts treated according to AWP Standard C16 are for agricultural purposes only. This particular type of fence post is used by many farmers and ranchers for barbed and other wire fencing. The distribution channels,

aesthetics, size, round shape, and random diameter of that type of fence post effectively limit its use for specific agricultural purposes, and make it inappropriate for residential applications. The Agency has determined, based on available information and field investigations, that agricultural fence posts are not sold into the residential market. On the other hand, wood treated for fence posts according to AWP Standard C5 is sold at the retail level for residential fencing and can be used for other residential applications as well.

Rather than delay acceptance of other portions of the voluntary cancellation/use termination requests until the reregistration review is complete, EPA has decided to accept the requests for voluntary cancellation/use termination for the other uses and defer any action with respect to requests to terminate agricultural fence post and permanent wood foundation uses until the Agency has evaluated those uses through the reregistration process. If at any time during the reregistration review the Agency determines it has sufficient information to take an action, that is, to either accept or refuse the requests for use termination of those uses, the Agency will take appropriate action. EPA believes this temporary deferral of action is consistent with the principle to phase out CCA for residential uses.

B. Concerns With the Possible Adverse Economic Impact on the Chromium Industry and Corpus Christi, Texas

Comments. Approximately 430 comments were received regarding the potential adverse economic effect from the proposed cancellation or termination of CCA products or treated wood uses on the chromic acid manufacturing plant in Corpus Christi, Texas. The residents of Corpus Christi have within their city limits a plant owned by Elementis Chromium L.P. (Elementis), the only major manufacturer of chromic acid in the United States. This chromic acid plant employs more than 100 residents of the Corpus Christi area and by its supply purchases and salaries, inputs about \$40 million per year into the economy of Corpus Christi. Elementis believes the projected 70% decrease in total sales of CCA-treated products 2 years after the amendment is accepted will have adverse economic consequences on the status of the plant operations and the city of Corpus Christi.

Also, the chromium industry and wood treatment industry requested EPA limit its action regarding the phase-out to only CCA-treated playground structures and decks at this time,

pending the outcome of the risk assessment being currently conducted by the Agency. It was requested that certain uses of CCA-treated wood, which were proposed for termination be allowed to continue. Specifically, the commenters requested that CCA-treated wood continue to be permitted for the following uses under the AWP Standard C2 (Lumber, Timber, Bridge Ties, Mine Ties for above-ground, soil and freshwater use), C5 (Fence Posts), C15 (Wood for Commercial-Residential Construction-Preservative Treatment by Pressure Processes), C16 (Agricultural Fence Posts and certain Wood used on Farms), and C22 (Permanent Wood Foundation Material).

Agency's response. By way of background, under FIFRA, a registration or "license" is issued to an applicant for a pesticide product once all necessary data requirements in support of the registration have been satisfied and the application has been found to be acceptable. In order to obtain a registration for a pesticide under FIFRA, an applicant for registration must demonstrate that the pesticide satisfies the statutory standard for registration. The standard requires, among other things, that the pesticide perform its intended function without causing unreasonable adverse effects on the environment. The term "unreasonable adverse effects on the environment" is defined, among other things, as "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide."

Under the statute, a registrant may at any time voluntarily request cancellation of a particular pesticide registration or termination of certain uses for the registration. Upon receipt of such requests, the Agency acts upon the requests pursuant to section 6(f) of FIFRA by notifying the public and soliciting comments from the public on the requests received. The Agency reviews the comments and may, based upon the comments received and/or any information or knowledge it may have concerning the pesticide and its uses in the environment, accept or deny the request either in whole or part.

With regard to the comments received from the chromium industry and on behalf of residents of Corpus Christi, Texas, as stated earlier, at this time, the Agency is not acting upon certain use terminations proposed by the registrants. Specifically, the Agency is deferring action on two use terminations addressed in the comments, agricultural fence posts and permanent wood

foundations. The Agency will examine such uses as part of its reregistration assessment of CCA products. However, the remaining voluntary cancellation requests were finalized on March 17, 2003, and the use terminations are effective as of May 16, 2003.

C. Concerns Raised by Environmental Groups

Comments. In their comments, the environmental groups (Clean Water Action, Healthy Building Network, and others) expressed concerns with the estimated 75 billion board feet (estimated by the American Wood Preservers Institute) of CCA-treated wood currently in use in residential settings. This proposed voluntary cancellation request affects future residential uses of CCA products but does not address existing CCA-treated wood decks and play structures. The environmental groups urged EPA to complete the CCA risk assessments to determine the dangers posed by CCA-treated wood currently in use. Concerns were also expressed over the safety of building contractors who come into contact with CCA-treated wood used during building construction and with utility workers working with utility poles. As a result, there were requests to extend use restrictions to include all uses, residential and industrial.

The environmental groups also believe that the time frame for the phase-out of CCA-treated wood from residential uses is too lengthy, and that the phase-out is not comprehensive enough. They appeared to assume that CCA-treated plywood would continue to be sold in retail stores indefinitely. The commenters also expressed concerns that the Agency doesn't address proper disposal of CCA-treated wood, and treated wood could be burned or dumped in landfills where it can contaminate soil and groundwater. They suggested that the registration be amended to include proper handling, use and disposal of CCA-treated wood.

Agency's response. The Agency acknowledges the concerns expressed by environmental groups regarding the potential risks of CCA to human health and the environment, and the need to proceed as quickly as possible given the potential risks. The Agency intends to address the commenters' concerns in two ongoing Agency processes in which the risk of the non-cancelled or terminated uses of CCA are currently being assessed. The Agency is currently conducting two risk assessments, one that focuses on children's exposure to CCA from play structures and decks constructed of CCA treated wood (uses of which are terminated pursuant to the

cancellation order), and one that focuses on the remaining industrial and marine uses. The result of the children's exposure assessment will serve as the basis for determining if further action is needed concerning existing play structures and decks.

The Agency is also currently examining the use of CCA-treated wood in light of the latest science and safety standards, under EPA's reregistration process. Upon the completion of the overall risk assessment, which will address the remaining uses of CCA and any occupational hazards that may exist from exposure to CCA, and the benefits assessment, the Agency will announce its proposed approach and the public will be afforded an opportunity to provide comments. The Agency will then consider any comments received and make a final determination as to the reregistration eligibility of the remaining uses of CCA.

With respect to the disposal of CCA-treated wood, CCA-treated wood is classified as non-hazardous waste under the Federal Resource Conservation and Recovery Act (RCRA). Disposal of CCA-treated wood is addressed via the Consumer Awareness Program (CAP). The CAP is a voluntary program established in 1986 (and later updated in 2001) by the registrants of CCA products, to protect consumers by providing them with information on the proper handling, use and disposal of CCA-treated wood. Under this program, instructions on the proper handling, use and disposal of CCA-treated wood are disseminated to consumers upon purchasing CCA-treated wood products via the Consumer Safety Information Sheets (CSIS) and/or end tag labeling applied to the wood product itself. EPA also disseminates guidance to consumers to advise against burning CCA-treated wood. Additional information regarding the CAP, handling, use and disposal of CCA-treated wood can be obtained from the Agency's Web site at: <http://www.epa.gov/pesticides/citizens/1file.htm>.

D. Other Significant Pertinent comments

1. *Clarification regarding AWPA Standard C5—comment.* An inquiry was made as to the potential decision to allow wood to be treated with CCA for agricultural purposes (fence posts) under AWPA Standard C16 yet questioning why it would be a prohibited use under the AWPA Standard C5.

Agency response. As discussed earlier, the Agency is not taking any action on the requests to delete the agricultural fence post use of wood

treated with CCA. Fence posts treated according to AWPA Standard C16 are for agricultural purposes only. This particular type of fence post is used by many farmers and ranchers for barbed and other wire fencing. The distribution channels, aesthetics, size, round shape, and random diameter of that type of fence post effectively limit its use for specific agricultural purposes, and make it inappropriate for residential applications. The Agency has determined, based on available information and field investigations, that agricultural fence posts are not sold into the residential market. Fence posts treated according to AWPA Standard C5, however, are for residential purposes. Prior to the voluntary cancellation/use terminations, the labels permitted wood treated for fence posts according to AWPA standard C5 to be used for residential fencing, and it could also possibly be used for other residential applications as well.

2. *CCA-treated wood export restrictions—i. Comment.* Comments sought clarification on whether wood treated with CCA can be exported to other countries for use in residential settings.

Agency response. As stated in this notice, under the Cancellation Order, effective December 31, 2003, wood treatment facilities are only allowed to treat wood products with CCA that are intended to be used only for those remaining uses approved on the CCA product label. Wood intended for use in prohibited residential settings may not be treated with CCA after December 30, 2003, unless the product being used is a pre-existing product and such use is permitted by that product label. (See Unit V: "Provisions for Disposition of Existing Stocks") Because of the method of product manufacture and distribution used in the wood preservation industry, the Agency does not expect any more than de minimus stocks to exist as of December 31, 2003, that do not bear the more restrictive label language. Hence, beginning December 31, 2003, unless the label on the affected product provides otherwise, it would be illegal to treat wood with CCA for any prohibited residential use, regardless of whether the treated wood is to be used in the United States or exported for use in other countries.

3. *Request received from American Wood-Preservers Institute (AWPI)—comment.* The American Wood-Preservers Institute, which provided comments on behalf of the companies that treat wood, requested that the proposed cancellation date of December 31, 2003, be extended an additional 3–6 months to allow further time for

treating plants' transition/conversion to alternative chemicals.

Agency response. The Agency recognizes that the transition to alternative chemicals may pose significant challenges to some stakeholders including wood treaters. However, in their request for voluntary cancellation/use termination, the registrants stated that a 22-month phase-in period was practicable based on the amount of time they believed is required to convert and retrofit the treating plants. The commenters did not present any substantial information that

would render the requested time period inappropriate, and therefore EPA is not extending the requested time period.

IV. Summary of Agency's Decision Regarding the Voluntary Cancellation/Use Termination Requests

The Agency has accepted portions of the proposed voluntary cancellation/use termination requests and is deferring action on other portions. As stated earlier, in light of the issues raised by commenters with regard to the agricultural fence post and permanent wood foundation uses, the Agency has decided to defer its decision and action

on the registrants' request to terminate these uses until the Agency has evaluated these uses through the reregistration process. If at any time during the reregistration review the Agency determines it has sufficient information to take any action, that is, to either accept or refuse the requests for termination of those uses, the Agency will take appropriate action at that time. EPA's decision on the other portions of the requests for voluntary cancellation/use termination is as follows:

1. The following product registrations were cancelled as of March 17, 2003:

62190-5	WolmanacR Concentrate 70%
62190-11	CCA Type C 50% Chromated Copper Arsenate

2. The following manufacturing product registrations were amended to

delete certain terminated uses as of May 16, 2003:

3008-66	Arsenic Acid 75%
10465-32	CSI Arsenic Acid 75%
62190-7	Arsenic Acid 75%

For the above identified manufacturing-use products, the accepted amended labeling reads as follows:

Effective December 31, 2003, this product may only be used (1) for formulation of the following end-use wood preservative products: ammoniacal copper zinc arsenate (ACZA) or chromated copper arsenate (CCA) labeled in accordance with the Directions for Use shown below, or (2) by persons other than the registrant, in combination with one or more other products to make: ACZA wood preservative; or CCA wood preservative that is used in accordance with the Directions for Use shown below.

Effective December 31, 2003, this product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers Association Standards: Lumber and Timber for Salt Water Use Only (C2), Piles (C3), Poles (C4), Plywood (C9), Wood for Highway Construction (C14), Round, Half Round and Quarter Round Fence Posts (C16), Poles, Piles and Posts Used as Structural Members on Farms, and Plywood Used on Farms (C16), Wood for Marine Construction (C18), Lumber and Plywood for Permanent Wood Foundations (C22), Round Poles and Posts

Used in Building Construction (C23), Sawn Timber Used To Support Residential and Commercial Structures (C24), Sawn Crossarms (C25), Structural Glued Laminated Members and Laminations Before Gluing (C28), Structural Composite Lumber (C33), and Shakes and Shingles (C34). Forest products treated with this product may only be sold or distributed for uses within the AWP Commodity Standards under which the treatment occurred.

3. The following end use product registrations were amended to delete certain terminated uses as of May 16, 2003:

3008-17	K-33-C (72%) Wood Preservative
3008-21	Special K-33 Preservative
3008-34	K-33 (60%) Wood Preservative
3008-35	K-33 (40%) Type-B Wood Preservative
3008-36	K-33-C (50%) Wood Preservative
3008-42	K-33-A (50%) Wood Preservative
3008-72	Osiose Arsenic Acid 75%
10465-26	CCA Type-C Wood Preservative 50%
10465-28	CCA Type-C Wood Preservative 60%
10465-32	CSI Arsenic Acid 75%
35896-2	Wood-Last Conc. Wood Preservation AQ 50% Solution CCA-Type A
62190-2	Wolmanac Concentrate 50%

62190-8	Wolmanac Concentrate 72%
62190-14	Wolmanac Concentrate 60%

For the above identified end-use products, the accepted amended label is to read as follows:

Effective December 31, 2003, this product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers Association Standards: Lumber and Timber for Salt Water Use Only (C2), Piles (C3), Poles (C4), Plywood (C9), Wood for Highway Construction (C14), Round, Half Round and Quarter Round Fence Posts (C16), Poles, Piles and Posts Used as Structural Members on Farms, and Plywood Used on Farms (C16), Wood for Marine Construction (C18), Lumber and Plywood for Permanent Wood Foundations (C22), Round Poles and Posts Used in Building Construction (C23), Sawn Timber Used To Support Residential and Commercial Structures (C24), Sawn Crossarms (C25), Structural Glued Laminated Members and Laminations Before Gluing (C28), Structural Composite Lumber (C33), and Shakes and Shingles (C34). Forest products treated with this product may only be sold or distributed for uses within the AWP Commodity Standards under which the treatment occurred.

4. Further amendments to the product label will be made by the registrants of the above identified amended registrations via notification to the Agency on or before December 1, 2003, to: (1) Delete the use directions in effect prior to these amendments, and (2) delete the preface phrase "Effective December 31, 2003," from the amended labels such that the statement begins by reading, "This product may only be used for preservative treatment of the following categories of forest products and in accordance with the respective cited standard (noted parenthetically) of the 2001 edition of the American Wood-Preservers' Association Standards..." These specific changes may be done via notification.

5. The registrants of the above identified products will notify their customers of the amended registrations/labels by certified mail. This is to ensure that those who are affected by the cancellation order are aware of the labeling changes.

6. The cancellation order included existing stocks provisions as described in Unit V below.

7. The text in 40 CFR 152.132 provides that a distributor (or supplemental registrant) is considered an agent of the registrant for intents and purposes under the act, and both the registrant and the distributor may be held liable for violations pertaining to the distributor product.

V. Provisions for Disposition of Existing Stocks

For purposes of this Order, the term "existing stocks" is defined, pursuant to EPA's existing stocks policy (56 FR 29362, June 26, 1991), as those stocks of a registered pesticide product which are currently in the United States and which have been packaged, labeled, and released for shipment prior to the effective date of the cancellation or amendment. Any distribution, sale or use of existing stocks in a manner inconsistent with the terms of the cancellation order or the existing stocks provisions contained in the order will be considered a violation of section 12(a)(2)(K) and/or section 12(a)(1)(A) of FIFRA. The following summarizes the effective dates of cancellation as well as the existing stocks provisions for each product subject to the cancellation order.

1. *Cancelled registrations (Table 2 in Unit II)*. The effective date of cancellation was March 17, 2003, the date upon which the cancellation order was signed. Registrants have 60 calendar days following the signing of the cancellation order (until May 16, 2003) in which to sell or distribute products listed in Table 2. Registrants were notified of the signing of the cancellation order and of the required changes to labels on the date the order was signed by telephone and facsimile transmission. Any sale, distribution, or use by the registrants of these affected products on or after that date is prohibited. Sale, distribution, or use by persons other than the registrants may continue until supplies are exhausted. Additionally, sale, distribution or use of the stocks by persons other than the registrant in the channels of trade may continue until depleted, provided any sale, distribution, or use is in accordance with the existing label of that product.

2. *Registrations amended to delete terminated uses (Table 3)*. The effective date of the cancellation effectuating the use terminations is May 16, 2003. The registrants' voluntary requests for termination of uses had requested that EPA allow use of the previous (unamended) labels for a period of 60 calendar days from the date on which the particular affected registrant receives EPA's approval of the amendments. The Agency is granting this request by making the effective date of cancellation 60 calendar days

following the signing of the cancellation order. Registrants were notified of the signing of the cancellation order and of the required changes to labels on the date the order was signed by telephone and facsimile transmission. This 60-day period is intended to allow a sufficient period of time for an orderly transition to the amended labels without disrupting supply and availability of product. On or after May 16, 2003, any sale, distribution, or use of existing stocks by the registrants of the subject registrations is prohibited. Sale, distribution, or use by persons other than the registrants may continue until supplies are exhausted. Additionally, sale, distribution or use of the stocks in the channels of trade by persons other than the registrant may continue until depleted, provided any sale, distribution or use is in accordance with the existing label of that product.

List of Subjects

Environmental protection, Chromated Copper Arsenate, Pesticides and pests.

Dated: March 27, 2003.

Jack E. Housenger,

Acting Director, Antimicrobials Division,
Office of Pesticide Programs.

[FR Doc. 03-8372 Filed 4-8-03; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

[OPP-2003-0074; FRL-7298-2]

Pesticide Product Registrations; Conditional Approval

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces Agency approval of applications submitted by Plant Products Co. Ltd., Brampton, ON L6T 1G1, Canada, to conditionally register the pesticide products *Pseudozyma flocculosa* strain PF-A22 UL (TGAI) technical grade of the active ingredient and SPORODEX L an end-use product (EP) containing a new active ingredient not included in any previously registered products pursuant to the provisions of section 3(c)(7)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended.

FOR FURTHER INFORMATION CONTACT: Sharlene R. Matten, Biopesticides and