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Pesticides and You

News from Beyond Pesticides / National Coalition Against the Misuse of Pesticides (NCAMP)

Poison Playgrounds

School Environment Protection Act

Historic Agreement Passes Senate, Threatened by House Leadership

CCA-Treated Lumber Poses Danger From Arsenic and Chromium • Beyond Picnics • ChemicalWATCH Factsheet: Boric Acid • Preparing for a Campaign

Letter from Washington

Protecting Children

Congress considers school pesticide use restrictions; playgrounds poisoned

You can help! Contacting your member of Congress can make a difference in protecting the health of children. It's simple. Ask your U.S. Representative to sign on to either the Republican or Democrat "Dear Colleague" letter. (See page 4 in this issue of PAY for details.)

The School Environment Protection Act

Acting on an historic agreement between organizations representing the environment, children and labor, and groups representing the chemical and pest management industry and agriculture, the U.S. Senate included a modified version of the School Environment Protection Act (SEPA) in its Education Bill (adopted by unanimous consent on June 19). The new SEPA of 2001 will help protect children from pesticides and promote safer pest management practices in schools. The legislation, sponsored by Senator Robert Torricelli (D-NJ), is included in the Better Education for Students and Teachers Act, S.1, which amends the Elementary and Secondary Education Act (ESEA). SEPA, which has now moved to a House-Senate Education Conference committee, was not included in the House Education Bill and is attracting opposition from the Republican leadership and the Agriculture Committee in the House.

Despite broad support, on July 18 the House Agriculture Committee held a hearing on SEPA, as part of an effort to block the legislation. The chairman of the Agriculture Subcommittee on Department Operations, Oversight, Nutrition and Forestry, Bob Goodlatte (R-VA), told the Associated Press, "We're going to fight this thing tooth and nail." The Bush Administration is also opposing SEPA.

The bill represents an important opportunity to ensure that every child across the country has access to an educational environment that is conducive to learning, without toxic chemicals in the air. This legislation requires schools to adopt integrated pest management (IPM) practices that minimize risk to children, utilize safer practices and provide safety information to parents and school staff when pesticides are used in the schools. Data show that IPM methods save schools money.

With regard to the three major programmatic components of the School Environment Protection Act (SEPA) — posting, notification and integrated pest management (IPM) — three states, including Maryland, Massachusetts and Michigan, have statutory requirements in all three areas. Nine states (Arizona, California, Illinois, Louisiana, Maine, New Jersey, New York, Texas and Washington) require two of the three major components in SEPA. Six states (Connecticut, Georgia, Minnesota, New Mexico, Pennsylvania and West Virginia) require one component of SEPA. There is variation within each category. While ten states require both indoor and outdoor posting, two states require outdoor posting only and one state requires indoor posting only. Fifteen states require notification registries. Eight states require IPM, and three additional states recommend IPM. SEPA, as passed by the Senate, takes elements from the experience in over 30 states that have some program and creates a minimum standard of protection across the country.

Those engaged in school IPM say that the programs do not cost any more than chemical-intensive programs. The Superintendent of Schools for the Mt. Lebonon School District in Pittsburgh, PA, Glenn F. Smartschan, Ed.D., recently wrote to Congress: "Mt. Lebanon School District's experience with the implementation of an IPM policy has been very positive. I have found it to be manageable and no more expensive than using herbicides and pesticides. Most importantly, the community is pleased and I feel confident that I am attending to the health and safety issues of the students in the district."

Poison Playgrounds

As a result of new data showing arsenic contamination from pressure treated wood playground equipment in soil and on wood surfaces, I wrote to every Governor and asked that they follow the lead of Governor Jeb Bush, who closed several contaminated parks and took steps to curtail future use of arsenic treated wood. The recent events in Florida raise serious public health and environmental concerns regarding exposure to the major wood preserving chemicals, namely chromated copper arsenate (CCA), pentachlorophenol (penta) and creosote.

There are a number of principal users of chemically treated wood products in your state, including utility companies (treated wood poles), construction companies (treated lumber) and the railroad owners (treated railroad ties). I also urged the Governors to consider adopting policy and/or pursuing legislative action that would require the principle users of treated wood to conduct studies on the feasibility of switching to alternative technologies that are less harmful to the environment.

The state of Florida hired Professor Steve Roberts, Ph.D., a toxicologist with the University of Florida, who recently determined that children could get enough arsenic on their hands from touching treated wood playgrounds and decks to pose a health risk. In addition, there are two class-action lawsuits, one in Florida and the second in Texas, that have been filed on behalf of people injured by exposure to the chemicals in CCA treated wood. This situation is not unique to Florida. It is surely happening in your state as well. This issue of PAY gives you the full story and suggests that you encourage your local media outlets to consider doing a story on this topic in your community and ask policy makers to take protective action.

The good news is that there is a solution to these problems, solutions that in many cases save taxpayers money.

— Jay Feldman is executive director of Beyond Pesticides/NCAMP

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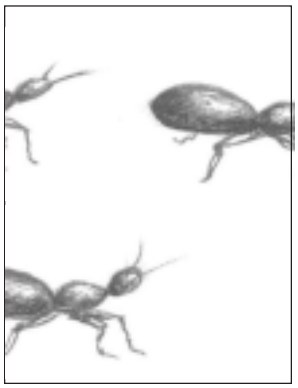

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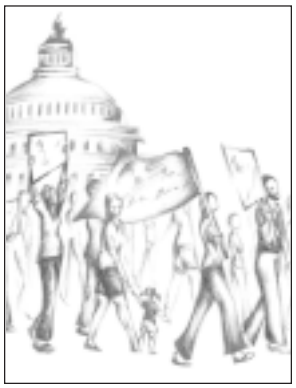

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National Headquarters:
701 E Street, SE,
Washington DC 20003
ph: 202-543-5450 fx: 202-543-4791
email: info@beyondpesticides.org
website: www.beyondpesticides.org
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Roadside Spray Drift Causes Damage, Litigation

Dear Beyond Pesticides/NCAMP,
We are involved in litigation against Pierce County, Washington, and the contractors it hired for roadside spraying and weed control. The weed control involved drift and over-spray that damaged landscaping in our yard. We first tried going through the proper government channels, but no one took us seriously. We felt the only alternative to get them to stop was to pursue litigation. We have been successful in obtaining a temporary injunction against the defendants, which prohibits the county or any contractor it hires from spraying anything within 500 yards of our home.

We have hired three experts who are of the opinion that our dead plants, which occur year after year, are the victims of over-spray and drift of herbicides. The defendants are contending that since some of the damaged plants are almost 150 feet from the roadside, it couldn't possibly be caused by drift. They have implied the damage is caused by over-watering, under-watering, various diseases, insects, and the fact that we don't dead-head our rhododendrons. The only theory they haven't tried is that aliens did it!

Do you know of any articles or evidence that these chemicals can drift well beyond the 150-foot range? Any help you could provide would be greatly appreciated. Thank you.

Rose Jennison
Takoma, WA

Dear Ms. Jennison,
Your actions to protect your health and property from the adverse effects of pesticides are noteworthy. Your case is important and provides encouragement to others who face similar hazards.

Drift is a significant issue that affects garden plants, farm crops, human health and wildlife. The Environmental Protection Agency (EPA) defines pesticide spray drift as "the physical movement of a pesticide through the air at the time of application or soon thereafter, to any site other than that intended for application" ("Spray Drift of Pesticides" December 1999, Office of Pesticide Programs, EPA). Although not included in EPA's definition of drift, pesticides can also wander off-target from erosion, migration, or wind blown contaminated soil particles for a time after application.

Many factors affect the distance that a chemical will drift from its target. If the chemical is applied aerially, the potential drift distance is much greater than if applied from the ground. Droplet size is another factor. A large droplet from a spray is much less likely to drift as far as smaller particles in a fog. According to the North Dakota State University Extension Service, a pesticide applied as a fog in a 3 mph wind can drift up to three miles. A very fine spray can travel 1,100 feet. ("Herbicide Spray Drift" August 1993, North Dakota State University Extension Service). Climate, wind direction and velocity, pressure of spray as well as air stability also determine the distance of drift. The volatility of the chemical is another important aspect. If an herbicide volatizes (changes to a gaseous state from solid or liquid form) after application, it will be able to drift farther. 2,4-D and dicamba both are susceptible to such transformation and can cause serious damage to non-target plants. See "Around the Country" on page of this issue of Pesticides and You for specific cases of drift exposures. Contact Beyond Pesticides/NCAMP for more information concerning drift, or any chemicals you suspect may be damaging your plants due to drift. Information packets are $4 ppd.

Network With Others Poisoned by the Insecticide Aldrin

Dear Beyond Pesticides/NCAMP,
I have enjoyed your website. Thanks for standing up for what is right. I wish I had a way of becoming more involved in the cause. You see, I have a direct interest in the control of pesticides. My brother died at the age of three after exposure/ingestion of the chemical aldrin. My parents had their home exterminated after a company came around soliciting sales for termite control. That was on May 12, 1965. They dug a trench around the house and drilled holes in the pillars then filled them with aldrin. They also sprayed under the house. The saturation was so intense that my mother had to wipe the aldrin from the floor on the inside of our home. My brother began to get very ill two weeks later and was finally hospitalized on June 9, 1965. He died on August 24, 1965 from hemolytic anemia and total kidney failure. He suffered a horrific death. I have seen his medical records. They are full of episodes of convulsions, seizures, muscle twitches and spasms. He suffered from his head to his toes every day. They gave him up to die many times before he finally passed away. No one told us of the dangers of aldrin. In 1951, a man by the name of Spiotti wrote a book about the toxicity of aldrin and its toxic effect on the kidneys. Still, it was being used in 1965 and it killed my brother. I would love to tell the story of my brother. I thought about writing a book. It seems that someone has to be held responsible for my brother's death. Do you know if there have been aldrin lawsuits? Also, other people have died as a result of aldrin. I would like the opportunity to speak to another family whose lives were altered by aldrin. Do you know how I would find out who these people are? I get so angry when I think about the carelessness of the people who have the power and had the power even in 1965 and do/did nothing about it.

Sincerely,
Carma Loft
via email
clofton49@hotmail.com

Dear Ms. Loft,
I am very sorry to hear of your brother's tragedy. Unfortunately, the toxicity of aldrin has affected many people.

Aldrin is an organochlorine insecticide that quickly breaks down into dieldrin when in the body or the environment. Dieldren is persistent in the environment and can bioaccumulate in body fat. Both of these chemicals have shown to be highly toxic in animal studies, causing such adverse effects as liver damage, immune system suppression, and effects on the central nervous system and endocrine system.

A woman living in Mississippi encountered problems with aldrin when her home was sprayed to control pests in the 1980's. As a result of the spraying, she and three other members of her household became extremely ill. The applicators contend that she is the only person that has had a problem from their use of aldrin. A couple in North Carolina was exposed to aldrin when their heating unit was incorrectly installed. Aldrin vapors drew into their home resulting in fainting spells and nervous system attacks. They are now chemically sensitized and can hardly ever leave their new home.

One woman and her two daughters suffered from exposure to aldrin sprayed in their Tennessee home. Their symptoms included dizziness, nausea, eye irritation and tightness in the throat. In addition, the mother suffered from a constant thirst, night sweats and memory lapses. Her resulting rambling and incoherent speech forced her to give up her teaching career. The family brought their case against Terminix International to court and were awarded $10 million by a trial jury. This was later cut down to $2 million by a state appeals court.

There are several resources and many support groups for victims of pesticide exposure. For a listing of such groups, please contact Beyond Pesticides/NCAMP.

Beyond Pesticides/NCAMP operates a Pesticide Incident Reporting System. If pesticides have adversely affected you, we urge you to report your exposure by filling out a Pesticide Incident Record. Please contact Beyond Pesticides/NCAMP to receive a form, or download one in PDF from our website at www.beyondpesticides.org. We use these reports to provide a weighty and powerful testimony in support of reforming the nation's pesticide policies and practices.

For more information on aldrin and dieldrin, please contact Beyond Pesticides/NCAMP. ($4 ppd). To get involved with this issue in your community, contact Beyond Pesticides for a Community Toolkit. ($12 ppd).

Termite Pesticide Questioned

Dear Beyond Pesticides/NCAMP,
I am currently a resident of military housing and have been told that, due to termite infestation, a product called "Termidor" containing fipronil will be used on my residence. My wife is six weeks pregnant. I am worried about her being exposed to a substance that could prove to be problematic for our child.

If you have information or know where I might be able to find some on this topic, I would greatly appreciate it. Thank you for your time.

Sincerely,
Matt Beer

Dear Mr. Beer,
Fipronil is an insecticide that Beyond Pesticides rates as toxic. Some products that contain this chemical are Maxforce®, Chipco® Choice™, Frontline®, and Frontline® Topspot. As you mentioned, Termidor® also contains fipronil, and is used to exterminate both drywood and subterranean termites. Animal studies on the toxicity of fipronil show it is neurotoxic in both rats and dogs. Severe skin reactions to Frontline® Topspot for Cats and Topspot for Dogs have occurred, with skin irritation and hair loss at site of application. Organs affected by chronic exposure may include the liver, thyroid and kidney. Reproductive toxicity occurred at the higher doses tested, with clinical signs including reduced fertility, decreased litter size, decreased body weights in litters, and fetus mortality. There is no evidence of fipronil causing birth defects, but it may cause a delay in development at high doses. (National Pesticide Telecommunication Network, 1997)

Although fipronil is toxic, there are nontoxic and least toxic methods to control term ites. The first thing to do is figure out if you have an active infestation. Look for signs of wood boring activity such as sawdust, mildew, cracks, holes and insect droppings. If live termites are found, there is an active infestation.

Use of baits provides a safer alternative to pesticide spraying. New bait systems that do contain toxic chemicals greatly reduce human exposure. Boric acid products such as Bora-Care® and Tim-Bor® are available to use as least-toxic alternatives. Though boric acid is a safer alternative, it is a poison and should be handled with care. Nontoxic alternatives to control the infestation include heat, cold, microwaves and electricity. Nematodes are a biological alternative that has been successfully used by many pest managers. To find a service provider that uses alternative methods of control, see Beyond Pesticides' Safety Source for Pest Management at our website.

*To prevent future infestations of termites, reduce the overall moisture in your home by repairing any leaks and providing adequate ventilation in damp areas. Use of barriers and termite shields will also decrease the potential for infestation. For more information on the least toxic control of termites or for further information on fipronil, please contact Beyond Pesticides. Information packets are $4 p*pd.

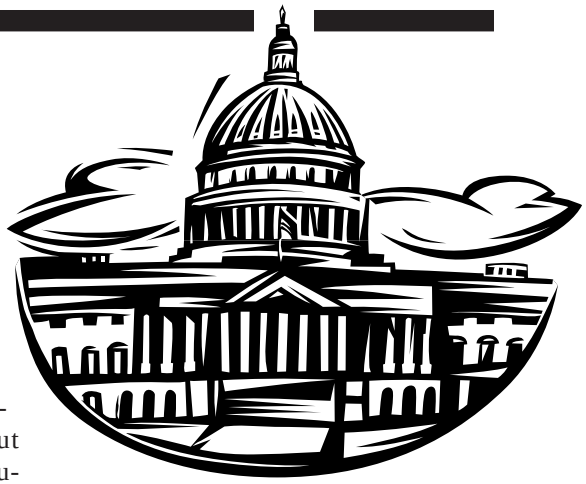
Write Us!

Whether you love us, hate us or just want to speak your mind, we want to hear from you. All mail must have a day time phone and verifiable address. Space is limited so some mail may not be printed. Mail that is printed will be edited for length and clarity. Please address your mail to:

Beyond Pesticides/NCAMP
701 E Street, SE
Washington, DC 20003
fax: 202-543-4791
email: info@beyondpesticides.org
www.beyondpesticides.org

Washington, DC

SEPA Passes in Senate Education Bill, Moves to House Senate Conference Committee



House Republican Leadership and Bush Administration Oppose SEPA

On June 19, 2001, the U.S. Senate took a great step towards protecting children from pesticides in schools by adopting the *School Environment Protection Act* (SEPA) by unanimous consent as an amendment to the *Better Education for Students and Teachers Act*, S.1. Because there was no version of SEPA included the House of Representatives version of the bill (H.R.1), the fate of this landmark legislation now rests in the hands of a joint House-Senate Conference Committee, which was appointed to iron out the differences and form a compromise between the House and Senate versions of the education reauthorization bills. Both Democrats and moderate Republicans in the House are supporting the measure. Republicans Connie Morella (MD), Jim Ramstad (MN), Wayne Gilchrest (MD) and Benjamin Gilman (NY) and Democrat Rush Holt (NJ) sent separate "Dear Colleague" letters on July 18 and July 20, 2001, respectively, asking the Conference Committee to accept the bill language without any weakening amendments. Unfortunately, support for SEPA on Capitol Hill is not universal. Despite bipartisan support in the Senate, House Agriculture Committee chairman, Bob Goodlatte (R-VA) told the *Associated Press* that his committee would "fight (SEPA) tooth and nail." The Republican leadership in the House has also vowed to kill the legislation.

If the SEPA amendment, which is a negotiated version of the original SEPA bill introduced by Senator Torricelli in 1999, is accepted by the joint House-Senate Conference Committee, it would require: (i) local educational agencies to implement a school pest management policy considering sanitation, structural repair, mechanical, biological, cultural and pesticide strategies that minimize health and environmental risks as developed by the state and EPA approved; (ii) universal notification 3 times per year of school pesticide use; (iii) parental and school staff access to health and toxicity information on all pesticides used in schools; (iv) the establishment of a registry for parents and school staff

— TAKE ACTION —

Get your Member of Congress to sign on to one of two "Dear Colleague" letters in support of the *School Environment Protection Act* (SEPA) now circulating on Capitol Hill. Don't let the Republican Leadership in the House and the Bush Administration kill this legislation when most people think it is reasonable. The letters, one Republican and one Democrat, ask the House Conference Committee on the Education Bill to accept the Senate-adopted SEPA provision in the Senate Education Bill without weakening amendments.

If your Representative is a Republican, ask him/her to sign on to a letter being circulated by Reps. Connie Morella (R-MD), Jim Ramstad (R-MN) Wayne Gilchrest (R-MD) and Benjamin Gilman (R-NY). This "Dear Colleague" was sent to all Republican members of Congress on July 18 and asks members to contact Kate Dickens (202-225-5341) with Rep. Morella to sign on.

If your Representative is a Democrat, ask him/her to sign on to a letter being circulated by Rep. Rush Holt (D-NJ). His "Dear Colleague" was sent to all Democrat members of Congress on July 20 and asks members to contact Brian Branton (202-225-5801) with Rep. Holt to sign on.

If your Representative is on the Education Conference Committee (see below), please write them directly and ask them to support the Senate-adopted SEPA provision in the Education Bill. Conferees include: House of Representatives: Boehner (R-8th OH), Miller (D-7th CA), Petri (R-6th WI), Roukema (R-5th NJ), McKeon (R-25th CA), Castle (R-At large DE), Graham (R-3rd SC), Hilleary (R-4th TN), Isakson(R-6th GA), Kildee (D-9th MI), Owens (D-11th NY), Mink (D-2nd HI), Andrews (D-1st NJ), and Roemer (D-3rd IN). Senate: Kennedy (D-MA), Dodd (D-CT), Harkin (D-IA), Mikulski (D-MD), Jeffords (I-VT), Bingaman (D-NM), Wellstone (D-MN), Murray (D-WA), Reed (D-RI), Edwards (D-NC), Clinton (D-NY), Lieberman (D-CT), Bayh (D-IN), Gregg (R-NH), Frist (R-TN), Enzi (R-WY), Hutchinson (R-AR), Warner (R-VA), Bond (R-MO), Roberts (R-KS), Collins (R-ME), Sessions (R-AL), DeWine (R-OH), Allard (R-CO) and Ensign (R-NV).

For all the background information you need, including copies of the "Dear Colleague" letters, see www.beyondpesticides.org (scroll down on home page to SEPA) or contact Beyond Pesticides at 202-543-5450.

to sign-up to receive 24 hour pre-notification of a pesticide application; (v) information on the pesticides' adverse health effects on the notice provided via the registry; (vi) signs to be posted 24 hours prior to the pesticide application and remain posted for 24 hours; (vii) record keeping of pesticide use and disclosure; and, (viii) 24-hour reentry period for pesticide applications, unless the label specifies a specific reentry interval. Antimicrobials, baits, gels, and pastes are exempt from notification and posting requirements.

Republican House Tells President from Texas: Don't Mess with Drinking Water

On July 27, 2001, the White House received a reality check when the Republican-controlled House of Representatives voted to block the Bush Administration's effort to delay and weaken the new federal drinking water standard for arsenic that was approved by President Clinton during his final days in office. By a 218 to 189 vote, the House approved an amendment that prevents EPA from spending funds to weaken the arsenic standard. "Today's arsenic vote sends a clear, bipartisan message to President Bush: The American public doesn't want people messing around with their drinking water and environment," said Natural Resources Defense Council Senior Attorney Erik Olson. "The Republican-controlled House's clear rejection of the special interest-driven effort to gut the arsenic standard is an important landmark. We hope that the Senate quickly follows suit, so we can put the dark days of anti-scientific and anti-public health backroom deals on arsenic behind us." Nineteen Republicans joined the Democrats to secure this victory for public health.

Last March, the Bush Administration suspended the revised arsenic standard which lowers the maximum level of arsenic in drinking water by 80 percent, to 10 parts per billion, the same standard adopted by the World Health Organization and the European Union. The wood preservative, chromated copper arsenate (CCA), which is injected into lumber to protect against termites, beetles and humidity, leaches arsenic from the wood into the surrounding soil and groundwater, and forms surface residues on treated wood structures. Most outdoor wood products, including decks, benches, picnic tables and playground equipment, are treated with CCA. According to the National Academy of Sciences, long-term exposure to low concentrations of arsenic in drinking water can lead to skin, bladder, lung, and prostate cancer. Non-cancer effects of ingesting arsenic at low levels include cardiovascular disease, diabetes, and anemia, as well as reproductive and developmental, immunological, and neurological effects. Currently, more than 12 million Americans are drinking water that contains unsafe levels of arsenic.

Beyond Pesticides' Poison Poles campaign focuses on the hazards associated with exposure to the three most commonly used wood preservatives, namely CCA, pentachlorophenol, and creosote. Many people have suffered as a result of exposure to these toxic chemicals. Beyond Pesticides is seeking a phase out of the use of these chemicals in utility poles, playground equipment, railroad ties, building materials, and other wood products in favor of alternative materials such as recycled steel, recycled plastics, and concrete. For more information about wood preservatives or to read victims accounts of exposure, visit the Beyond Pesticides/NCAMP website atwww.beyondpesticides.org or call for a hardcopy of the online materials.

Pesticide Manufacturers Ask to be Indemnified for Hazards from Public Health Use Pesticides

In an attempt to sell more hazardous products without the risk of litigation costs, pesticide manufacturers are asking the federal government that they not be held liable for injuries caused by their products when used to combat public health threats. According to the Bureau of National Affairs (BNA), pesticide manufacturers have been increasingly reluctant to supply their products to fight public health diseases because of the litigation costs that can arise from their use. "Indemnification for pesticide makers is appropriate because public health pesticides benefit society by preventing vector-borne diseases," Don O'Shaughnessy, director of regulatory affairs for Cheminova Inc., of Wayne, N.J., told BNA. Cheminova refused to supply the organophosphate pesticide malathion to New York City in 2000 and 2001 without indemnification because of the fear of litigation. Cheminova also refuses to supply malathion to the Agriculture Department for emergency use against the Medfly in California without indemnification. "They will have to take this material by force because that's the only way we'll give it up," Mr. O'Shaughnessy said.

Environmentalists believe that pesticide manufacturers, and not the American taxpayer or governments, should bear the cost of the litigation caused by injury from these products. The cost of litigation is the price of marketing toxic chemicals that may adversely affect people's health and the environment. There has been a litany of cases in which pesticide makers have faced lawsuits for damages from legal, labeled uses of pesticides, and been successful. Chemical companies should not be given a "Get Out of Jail Free" card after exposing the public to their toxic products, say activists.

Around the Country

by John Kepner

West Nile Virus Pesticide Spraying Sends 37 People to the Hospital at Softball Game

At 6:00 pm on June 26, 2001, spectators in Moreau, New York gathered for a community softball game, not knowing that they would soon be exposed to a cloud of organophosphate poison. As the parents and friends of the mostly 15 and 16 year-old softball players cheered for their favorite teams, very few noticed a suspicious truck spraying a fine mist into the air just beyond the outfield fence. According to Moreau Emergency Squad Captain Andre Delvaux, the company Tree Care by Stan Hunt was applying Fyfanon ULV, a pesticide containing the organophosphate malathion. The goal was to kill mosquitoes that could be carrying the West Nile virus. Moments later, 37 young ball players and spectators were sent to the hospital to be treated for pesticide poisoning. "It was really bad," Coach Jeff Baker told the *Post Star*. "The kids got out of the dugout and tried to get some fresh air. We didn't know what it was." Most of the players, ages 15 and 16, and spectators experienced burning eyes, coughing, wheezing, headaches and nausea. Many who experienced symptoms were taken to the hospital in ambulances. One woman passed out while being interviewed by an emergency medical technician, the *Post Star* reported.

Malathion is a nerve poison, which acts by inhibiting the enzyme acetylcholine esterase. It has been linked to nervous system disorders, sensory damage, behavioral and physiological changes and death due to respiratory and cardiovascular failure. Studies have also shown the pesticide to cause cancer. Moreau officials claim the spraying was not scheduled during the game. "I was blown away," Councilman Larry Bulman told the *Post Star*. "I was shocked that they would do that. That's not what we discussed." Since the poisoning, the town has asked Tree Care by Stan Hunt to halt the spraying, while the incident is investigated. Moreau Supervisor Harry Gutheil said, "I'm very sorry that it happened." *Is your community spraying toxic pesticides to control mosquitoes? Beyond Pesticides has put together the West Nile Virus Organizing Manual (100 pp.) to help local activists promote common-sense mosquito management in their communities. The manual, complete with ChemWatch factsheets, information on non-chemical control, least-toxic alternatives, and media and community outreach strategies, is available through Beyond Pesticides for $10.*

New York State Fines Mosquito Management Company $1 Million

They caught the bad guys… this time. After months of exposing the residents of New York City to toxic pesticides and poisoning its own employees, Clarke Environmental Mosquito Management was fined $1 million by the New York State Department of Environmental Conservation (DEC) for violating state pesticide laws in its management of New York City's West Nile spray campaign last year, and for illegal pesticide sales in upstate New York counties. In addition, the DEC will increase oversight to ensure Clarke's future compliance with state and federal regulations on the training and certification of pesticide applicators. Upon hearing of the decision, Kent Smith, a former Clarke employee, said, "I'm happy that Clarke will finally have to pay for damaging our health. And it wasn't only the workers' health. When Clarke tested all their spray trucks at the depot everyday, they fogged the whole neighborhood. The other workers and I wanted to make sure that Clarke is never allowed to spray in New York City again."

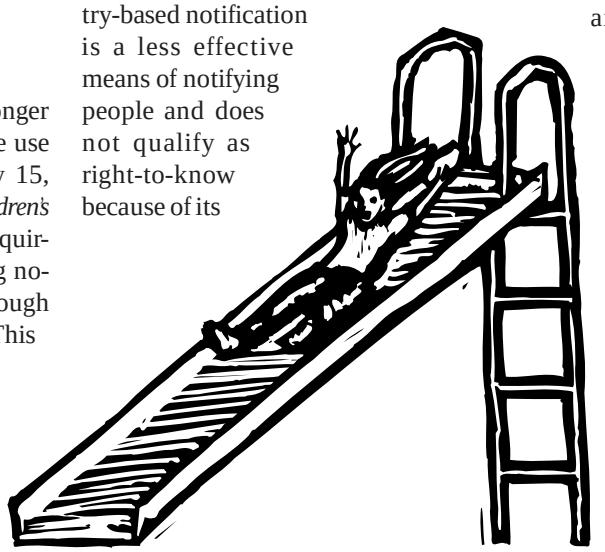
Clarke Mosquito Management issued a statement announcing that although it had agreed to the DEC's terms, it denied any wrongdoing. Reacting to Clarke's written assertions that there were no training violations, Samuel Gowrie, another former Clarke employee, said, "Not only did they not train us, they did not equip us properly. I complained on the job about feeling bad, and they took it as a joke. No training, no mask, no gloves, no nothing! And I am still feeling the effects from the spraying." According to Joel Kupferman, executive director of the New York Environmental Law and Justice Project (NYELJP), who serves as legal council to the Clarke employees, "The New York City Health Department claimed to exercise a high level of supervision over the spraying, and the City's WNV hotline assured members of

the public again and again that all pesticide spraying was being done in accordance with state and federal regulations. The City says it was spraying because of a public health emergency, meanwhile they were allowing their contractor to create a public health emergency right under their own noses. Since the City Health Department is the agency with primary responsibility for West Nile spraying, it in turn must share the blame for unleashing an illegal pesticide operation on to the streets of New York City."

Washington State Passes the *Children's Pesticide Right-to-Know Act*

Parents in Washington State will no longer be left in the dark regarding pesticide use in their children's schools. On May 15, 2001, Governor Locke signed the *Children's Pesticide Right-to-Know Bill* into law, requiring that school districts post warning notices, provide advance notification through a registry to parents who request it. This brings the total number of states offering some form of parental notification to seventeen. "This bill ensures that parents know when their children will be exposed to pesticides," said Senator Eide (D), who sponsored the bill with Representative Mike Cooper (D). "In the past, many parents simply didn't know when these chemicals, which can be very harmful to children, were being used. Now, parents will be fully notified in advance so they can make informed decisions for their kids." Washington Toxics Coalition (WTC), an environmental organization that played a large part in getting the bill passed, explained that parents will be empowered to make better informed decisions regarding their children's health in the classroom. In 1999, WTC surveyed Washington school districts, finding that 88% of the school districts surveyed use pesticides linked to cancer, reproductive damage, nervous system harm, or disruption of hormonal systems.

Despite the importance of the Washington state law, environmentalists would have preferred universal notification over a registry system. Because the law only requires a registry, parents must sign up to receive advance notification of pesticide applications. On the other hand, universal notification ensures that *all* parents, guardians, children and staff are aware and adequately warned about pesticide applications. In addition, providing prior notification to all individuals attending or working at a school is less obtrusive to the school's administrative staff than using a registry, and would not require an additional database. Schools can simply send universal pesticide notices as they would with other such announcements. Registry-based notification is a less effective means of notifying people and does not qualify as right-to-know because of its limited scope. Requiring that individuals place themselves on a registry affords only those who already know about toxic exposure the opportunity to be informed about pesticide use in the school. The *School Environment Protection Act* (SEPA), a federal school pesticide bill that Beyond Pesticides supports (See *School Environment Protection Act (SEPA) Passes in Senate Education Bill* on page 4), uses a combination of universal notification three times per year and a registry. *For more information about the* Children's Pesticide Right-to-Know Act, *contact Erika Schreder at the Washington Toxics Coalition at 206-632-1545,* eschreder@watoxics.org *or see* http://www.watoxics.org.



Chlorpyrifos Found in California Air Samples, Putting Over 22,000 Children at Risk

According to a new report by the Environmental Working Group (EWG), independent scientific monitoring found dangerously high concentrations of chlorpyrifos, an organophosphate pesticide whose residential uses are being phased out, in the air that many Californians breathe every day. The report, *Every Breath You Take* (February, 2001), reports that one-third of the ambient air monitoring samples from the San Joaquin Valley detected chlorpyrifos, which remains the most widely used agricultural insecticide in California. According to EWG, pesticide use in Fresno, Kern and Tulare counties puts more than 15 million pounds of toxic chemicals into the air each year, an amount equal to about one-third of the air pollution from most other area's industrial sources combined. In those three counties, more than 22,000 children attend school near sites of heavy use of toxic pesticides. "Every parent, and everyone else who cares about our children's health, has a right to know what toxic chemicals kids may be exposed to at school," said Bill Walker, EWG's California director. "When we send our kids off to school, we want to know they'll spend the day in a safe environment."

Government and independent studies show not only that pesticides routinely drift from farm fields onto nearby school campuses, but that drifting pesticides pose serious health risks for people miles away from the fields. Other recent studies paint a similarly grim picture of pesticide use in California. A study conducted by the California Department of Pesticide Regulation reports that cases of people being poisoned by drifting pesticides increased by 20 per-

cent last year. A National Cancer Institute researcher who matched pesticide data and medical records in 10 California agricultural counties recently reported that pregnant women living within 9 miles of farms where pesticides are sprayed on fields may have an increased risk of losing an unborn baby to birth defects. *In* The Schooling of State Pesticide Laws, *Beyond Pesticides documents six states that establish buffer zones around schools and other sensitive areas. For a copy of this report, see* www.beyondpesticides.org. *For more information on chlorpyrifos, pesticide drift or children's issues, contact Beyond Pesticides/NCAMP.*

Groups Uncover Government Documents Showing Pesticides Can Harm Endangered Salmon

In the Spring 2001 edition of *Pesticides and You* (Vol. 21, No. 1), Beyond Pesticides reported that several groups in the Northwest would be suing EPA for failure to protect endangered salmon (See *Gender Bending Pesticides May Reverse Sex in Endangered Salmon* in the Around the Country section). Since the filing of the lawsuit, the Northwest Coalition for Alternatives to Pesticides, Washington Toxics Coalition, and other plaintiffs have unearthed volumes of government documents proving that EPA knew that pesticides it was registering were dangerous to these endangered fish, yet failed to take the action required by the *Endangered Species Act*. On May 7, 2001, the groups filed these documents in Federal District Court in Seattle. The legal filings show that EPA has determined that current uses for 41 pesticides are likely to result in surface water contamination levels that threaten fish or their habitat. The groups also identified 13 pesticides that the U.S. Geological Survey (USGS) determined were present in watersheds used by salmon at concentrations at or above levels set to protect fish and other aquatic life. "In addition to EPA determining that these pesticides are a threat to fish or fish habitat, we know that they are commonly used in Pacific States and frequently detected in watersheds used by salmon," said Aimee Code, Right to Know Coordinator with the Northwest Coalition for Alternatives to Pesticides. "EPA's own analysis shows that pesticides not only hurt salmon directly but also threaten their food supply and other habitat needs."

The fishing industry, already feeling the effects of a dwindling salmon population, is watching EPA's next move very carefully. "People who depend on fishing for a living have a right to expect the federal government to act when they find threats to salmon," said Glen Spain with the Pacific Coast Federation of Fishermen's Associations. "It's obvious that EPA needs to do more to ensure salmon are protected from harmful pesticide exposures. Toxic chemicals in our rivers are a real problem for salmon as well as human health, and we remain hopeful that the new EPA Administrator will direct the agency to take corrective action." According to Earthjustice Legal Defense Fund, EPA and USGS have a duty to protect threatened and endangered runs of salmon from these pesticides under the *Endangered Species Act*, but have failed to do so. *For more information, contact the Northwest Coalition for Alternatives to Pesticides at 541-344-5044 or visit www.pesticide.org.*

Welcome

We would like to welcome the most recent additions to the Beyond Pesticides Staff. Meghan Taylor, our new public education associate, brings the experience of a recently completed internship at Environmental Media Services and a background in Environmental Studies from the State University of New York at Geneseo. Toni Nunes, our new special projects director, joins us with an MA in policy studies from Johns Hopkins University, with an emphasis on environmental health policies and nonprofit management. We apologize to our public education coordinator, Becky Crouse, who joined the staff in July 2000, for not tracking her down with our camera. Becky brings to Beyond Pesticides her experience as the former information coordinator with the New York Coalition for Alternatives to Pesticides and a BA in English from the State University of New York at Albany.

From left to right: Toni Nunes, Meghan Taylor and Becky Crouse.

Poison Playgrounds

An investigation into wood treated with CCA

The Environmental Protection Agency (EPA) has chosen to allow children to play with arsenic. Chromated copper arsenate (CCA) is a wood preserving pesticide registered for use by EPA. Scientific studies prove that the three chemicals that make up CCA, namely arsenic, hexavalent chromium (chromium (VI)) and copper, are leaching out of CCA-treated wood into the soil and onto the surface of the wood.[1] EPA classifies both arsenic and chromium (VI) as "known human carcinogens."[2] Scientists have documented that kids put their hands into everything including their mouths;[3] but of course, parents already know this. When you add all this together the outcome is clear, children's health is at risk because they are ingesting arsenic and chromium (VI) leaching from CCA-treated playground equipment.

A number of media outlets have been conducting soil and surface wipe samples of CCA-treated playground sets in their communities and the findings are always the same: arsenic is leaching out of CCA-treated playground equipment. The *St. Petersburg Times* in Florida first reported on this problem back in March of 2001 with Julie Hauserman's special report, *The Poison in Your Back Yard*.[4] After the story broke, the State of Florida closed down a number of parks and removed CCA-treated playground equipment and the soil contaminated with arsenic as a safety precaution.

In May of 2001, Fox 5 News in Washington, DC took soil samples from underneath a variety of CCA-treated wood structures including a deck, a vegetable garden, and local playgrounds. In each case, with the exception of the playground that was not constructed of CCA-treated wood, Fox 5 reported highly elevated levels of arsenic in the soil, between four to nine times higher than average background levels. Also in May, King 5 News in Seattle, WA, sampled soil near pentachlorophenol-treated utility poles and found that in every case pentachlorophenol had leached out of the wood.[5]

Despite these extremely high levels, EPA officials have been strangely silent and have not recommended immediate action. Industry scientists dismiss the findings or call for more studies. The exposure and risk continue even though alternative materials, such as recycled plastics and steel, and other less toxic preservatives are available.

Transcribed below is the Fox 5 News piece *Poison Playgrounds: CCA Wood Investigation*. Beyond Pesticides strongly encourages everyone to contact their local media outlets and urge them to conduct the same kind of investigation. With the national spotlight focused on the hazards of CCA and EPA's ongoing risk assessment of the heavy-duty wood preservatives (*see story on page 13*), the iron is hot and it is time to strike. *For a copy of a video containing the reports from Washington and Seattle, as well as the Twin Cities, MN, contact Beyond Pesticides; tapes are available for $10 each*.

Fox 5 News at 10:00 pm May 7, 2001

Mike Landess (Fox 5 Anchor): A treatment to preserve this wood could be toxic for your family. Almost all the wood that Americans use to build outdoor projects is made with pressure treated lumber.

Tracey Neale (Fox 5 Anchor): The treatment keeps the wood from rotting but the chemicals used are dangerous. Chromium, copper, even arsenic. And they can be linked to serious medical problems. Tonight, a Fox 5 investigation - Poison Playgrounds. Melanie Alnwick is live in Northwest [DC] with the story. Melanie.

Melanie Alnwick (Fox 5 Reporter): Friendship Turtle park here in Northwest [DC] is just one of the places we got positive test results for arsenic. But it's not just in playgrounds. You can find it in decks, picnic tables, even in planter boxes as you said, and just about any outdoor wood product that you might have will have those chemicals in it. And some say what you aren't told about pressure treated wood can hurt you.

These are the sights and sounds of spring. Home improvement projects are in full swing, lumber is flying off the shelves in home improvement stores.

Carol Frysiek (Purchaser of CCA-treated wood): I was just looking for the wood to build a vegetable garden.

Melanie Alnwick: Most of the wood used for projects like home gardens is pressure treated. In fact, six and a half billion board feet of this stuff makes its way into backyards, decks, picnic tables and playgrounds every year. Pressure-treatment makes weak pine stronger so it can withstand decay from weather, fungus and insects. That's good, but that's not the whole story. Pres-

sure-treated means the wood is pumped full of chemicals and pesticides – chromium, copper and arsenic. It's called CCA.

Jay Feldman (Executive Director, Beyond Pesticides): The chemicals that are out there are exceedingly toxic.

Melanie Alnwick: Those chemicals are known to cause cancer, neurological and reproductive problems, and can be toxic to unborn babies. Attorney David McGray represents clients who have been sickened by CCA-treated wood. He says people should be told a lot more about its dangers.

David McGray (Attorney): A stamp on the wood, which states, "Warning", big words, "Warning. This wood contains chromium, copper and arsenic." People need to know that.

Friendship Turtle Park, Washington, DC.

Melanie Alnwick: Children are constantly exposed to pressure-treated wood and the problem isn't just the wood. The dangerous chemicals often seep into soils around playgrounds and decks made from CCA lumber. That's been documented in several states including Connecticut, where the health department has issued this warning: "Exposure from CCA-treated wood can be the major source of arsenic for children who frequently play on CCA-treated playscapes, tree houses or decks."

Arsenic from treated wood was also found in Florida, prompting authorities there to close some playgrounds and even state parks until the soil could be cleaned up, or the tainted structures removed. The problems in those states made us wonder if there could be a problem here, in the Washington area. We decided to investigate to find out if you and your kids are being exposed. We collected samples from playgrounds, decks and gardens in Virginia, Maryland, and the District, and then we sent them to a lab in Pennsylvania for testing. Dr. Elizabeth Anderson, founder and former director of the EPA risk assessment program examined the results for us.

Elizabeth Anderson, Ph.D. (President and CEO, Sciences International, Inc.): You have some interesting spot checks. We have data points that are high. They're higher than some background data points.

Melanie Alnwick: Arsenic is naturally found in soil. Its levels vary across the country. The U.S. Geological Survey says that the national average for arsenic levels in soil is 7.2 ppm.

So, what did we find? Let's start with this Arlington [VA] home. The arsenic levels in the soil around this pressure-treated deck measure more than 63 ppm. Nearly 9 times higher than the national average.

You would think an organic garden would be healthy. We tested this one in Ashburg, Virginia. The results? More than 54 ppm, seven and a half times higher than the national average.

Jeff Gustafson (owner of garden): The girls eat a lot of raspberries. We have raspberries and blueberries and this is rhubarb, and tomatoes.

Melanie Alnwick: Scary, but Dr. Anderson says chances the arsenic will seep into the vegetables is low. But still, Jeff Gustafson isn't taking any chances.

Jeff Gustafson: Sure, I'll think twice about it now. You can tear it all out and redo it.

Melanie Alnwick: At Friendship Park in Northwest DC, which proudly bears this sign, "One of the areas best playgrounds," arsenic in our sample was nearly 39 ppm, over five times above the national average.

It's a similar story in Maryland. In Cabin John Regional Park, we found 27 ppm, almost 4 times above average.

Jan Golden (playground patron): That's a little scary. Thankfully my children are a little bit older and not everything is going into their mouths. If I had little ones I would hesitate.

Melanie Alnwick: Finally, Willard Park in Chevy Chase [MD] – only 1.38 ppm. Why so low? Hard to say scientifically, but the playground manufacturer did tell us they don't use arsenic in the wood treating process.

Elizabeth Anderson, Ph.D.: I don't think we have the data right now in these data points to say that parents should be overwhelmingly concerned about this particular issue, although it is something that should be looked into, and it should be investigated.

Melanie Alnwick: While it might seem that CCA-treated wood is everywhere, there are some notable places you won't find it, like here in any of the animal exhibits at the National Zoo. Alternatively-treated wood is used everywhere else, like on this foot bridge on the way to the Amazon exhibit.

Curator with National Zoo: After a period of time, our staff concluded they'd prefer to use the pressure-treated wood that doesn't have the arsenic in it, just because it's in the best interest of our animals.

Melanie Alnwick: Curators at several zoos nationwide feel the same way. So do the people here at Disney's Animal Kingdom. They too refuse to use CCA-treated wood.

The problem isn't just getting attention in our country. CCA-treated wood is banned in three countries [Switzerland, Vietnam, and Indonesia] and there are restrictions or proposed restrictions on it in six others [Sweden, Denmark, Germany, Japan, Australia, and New Zealand]. No such restrictions, however, exist in our county.

Jay Feldman: How can we be sure that the kinds of cancer we're experiencing, the elevated rates of breast cancer, of prostate cancer, of childhood leukemia are not tied back to this chemical that is in the environment. It is in our homes, around our homes and in our schoolyards.

Melanie Alnwick: The EPA considered banning CCA in 1984 because of the health risks. Despite that, the EPA stopped short, deciding that the benefits of CCA-treated wood outweighed the risks. The government and the companies that make CCA-treated wood decided to implement a voluntary consumer awareness program. But that doesn't always happen.

Carol Frysiek (Purchaser of CCA-treated wood): Nobody asked me or told me anything about it.

Melanie Alnwick: Now EPA guidelines say there should be prominently displayed placards where you buy the wood and consumer information sheets available that say exposure may present certain hazards, and warn people to use protective gloves, eye goggles and dust masks when cutting or handling the wood, to wash exposed areas thoroughly after working with it and to wash sawdust-laden clothes separately.

Carol Frysiek: That's amazing. I didn't know that. And I have built decks before and sawed it, and did not know any of that.

Melanie Alnwick: We went in search of those consumer information sheets at local home improvement stores. They are here, but you'd never know it - on the back of these lumber labels buried in stacks of two by fours. And many employees don't even know where to find them.

Employee at home improvement store: OK, let me find one. What was it called again?

Melanie Alnwick: If you know what to ask, you can get more information.

Employee at home improvement store: Don't use that in a planter box for edible things, 'cause it's got arsenic in it.

Melanie Alnwick: The EPA admits the program isn't working. And though officials refuse to go on camera, the agency did tell Fox 5 that the agency is looking at ways to make consumer information mandatory.

Scott Ramminger (President, American Wood Preservers Institute): Sure I think a better job could be done on it.

Melanie Alnwick: Even the people who make CCA-treated wood admit consumers often don't get the information they need. But they say CCA is perfectly safe.

Scott Ramminger: You just won't find any studies that question the safety of this product.

Melanie Alnwick: In fact, the American Wood Preservers Institute claims CCA-treated wood is actually better for the environment.

Scott Raminger: It reduces the need to cut down more trees because obviously if you're building things out of untreated wood, they would rot, they would need to be replaced, so it saves trees, it saves energy.

Melanie Alnwick: But others believe the savings just aren't worth it.

Jay Feldman: From the standpoint of a child, playing on a piece of playground equipment and being exposed to a carcinogen, we don't view that as an acceptable risk.

Melanie Alnwick: In the meantime, the decks are going up, the playgrounds are pulsing with kids and most are completely unaware of what's in the wood they're on.

Now, there are alternatives to CCA-treated wood, like recycled composites. There's even a pressure-treatment process that doesn't use arsenic in it. But it's a little harder to find. A lot of stores say that there really isn't a wide consumer demand for it yet.

Now, what can you do if you already have a deck or playground made with pressure-treated wood? Experts say that you can seal it. In fact, the state of California now requires all of the schools to seal their wood playgrounds every two years.

We're live in Northwest, I'm Melanie Almwick with Fox 5 news.

Tracey Neale (Fox 5 Anchor): Melanie, speaking of consumers, this week the EPA will meet with environmentalists and industry experts to discuss shortcomings of the consumer awareness program.

Arsenic on the Surface of the CCA-Treated Wood Poses Extreme Risks to Children

Many studies have established that arsenic leaches out of CCA-treated playground sets onto the surface of the wood. This is called dislodgeable arsenic and children pick it up on their hands from touching the wood. Studies have established that children regularly stick their hands and other objects into their mouths.[1]

Stephen Roberts, Ph.D., with the University of Florida's Center for Environmental and Human Toxicology, conducted an analysis of three formal assessments of risk resulting from dislodgeable arsenic exposure through direct contact with CCA-treated wood.[2] As part of that analysis, Dr. Roberts calculated the risk of cancer, based on EPA's oral cancer slope factor for arsenic,[3] associated with a range of levels of dislodgeable arsenic, assuming daily exposure for five years (see Table 1). EPA has determined that a chemical that causes no more than one additional case of cancer in one million people (expressed as 1×10^{-6}) represents an acceptable risk. Table 2. lists the results of surface wipe samples reported in Dr. Roberts' analysis. These data show that children face a real and significant risk of cancer from simply touching CCA-treated wood and ingesting the arsenic via hand to mouth contact.

Table 1.
Cancer risks and daily doses associated with exposure to CCA-treated wood with different levels of dislodgeable arsenic (Roberts, 2001)

Dislodgeable arsenic (mg/100 cm2)	Dose (mg/day)	Cancer risk
1	0.76	4.22×10^{-6}
10	7.60	4.22×10^{-5}
25	18.90	1.06×10^{-4}
35	26.70	1.48×10^{-4}
50	38.10	2.11×10^{-4}
100	76.00	4.22×10^{-4}
250	191.00	1.06×10^{-3}
632	482.00	2.67×10^{-3}

Table 2.
Levels of Dislodgeable Arsenic Measured in Surface Wipe Tests

Study Cited by Roberts	Maximum Level of Dislodgeable Arsenic (mg/100 cm2)
Department of Health Services of State of California (1987)	250.0
Consumer Product Safety Commission (1990)	32.1
Department of Analytic Chemistry for the State of Connecticut (1998)	632.0

1 See for example, Zartarian, V.G. et al. 1997. Quantified Dermal Activity Data From A Four-Child Pilot Field Study. Journal of Exposure Analysis and Environmental Epidemiology. 7(4): 543-552.

2 Roberts, S.M. and H.O. Ochoa. 2001. Letter dated April 10, 2001, addressed to John Ruddell, Director, Division of Solid Waste with Florida Department of Environmental Protection.

3 EPA's oral cancer slope factor for arsenic is 1.5 per mg/kg-day. The slope factor is the result of application of a low-dose extrapolation procedure and is presented as the risk per (mg/kg)/day. See EPA's IRIS: Arsenic, inorganic. http://www.epa.gov/iris/subst/0278.htm#I.A.

1 See for example Stilwell, D. 1999. Arsenic in Pressure Treated Wood. Department of Analytical Chemistry, The Connecticut Agricultural Experiment Station. http://www.caes.state.ct.us/PlantScienceDay/1999PSD/arsenic99.htm.

2 Environmental Protection Agency. 1998. Integrated Risk Information System: Arsenic, inorganic. http://www.epa.gov/iris/subst/0278.htm#II. and EPA. 1998. Integrated Risk Information System: Chromium (VI). http://www.epa.gov/iris/subst/0144.htm#II.

3 See for example, Zartarian, V.G., A.C. Ferguson, and J.O. Leckie. 1997. Quantified Dermal Activity Data From a Four-Child Pilot Field Study. Journal of Exposure Analysis and Environmental Epidemiology. 7(4): 543-552.

4 All of the *St. Petersburg Times* articles are available on their website: http://www.sptimes.com/News/webspecials/arsenic/.

5 Miller, S. 2001. KING 5 Special Report: Are power poles poisoning the ground around them? http://www.king5.com/localnews/specialreportsdetail.html?StoryID=18737.

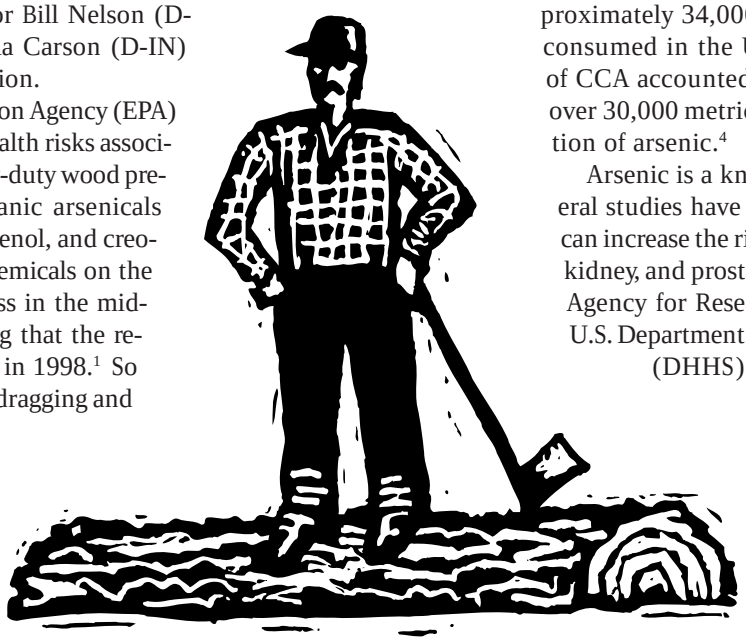
CCA-Treated Lumber Poses Danger From Arsenic and Chromium

What industry and EPA have avoided telling you could hurt you

by Greg Kidd, J.D.

What we have: A voluntary, unenforceable agreement between the Environmental Protection Agency and the wood treatment industry to provide consumers with safety information about wood treated with chromated copper arsenate (CCA) at point of purchase. Even industry officials acknowledge that it has never worked.

What we need: A law that requires all CCA-treated wood be affixed with warning labels providing consumers with information about the health effects of arsenic and how to minimize exposure. Senator Bill Nelson (D-FL) and Congresswoman Julia Carson (D-IN) have drafted just such legislation.



The Environmental Protection Agency (EPA) is currently reevaluating the health risks associated with exposure to the heavy-duty wood preservatives, namely the inorganic arsenicals (such as CCA), pentachlorophenol, and creosote, among the most toxic chemicals on the market. EPA began this process in the mid-1990s, and is on record stating that the reevaluation would be complete in 1998.[1] So began the EPA's history of foot dragging and delay with the wood preservatives. The latest statement from the agency is that the reevaluation process will not be complete before 2003. It remains the policy of Beyond Pesticides to see the heavy-duty wood preservatives taken off the market. In the meantime, it is critical that consumers be provided with information about the health risks of exposure to wood treated with these toxic materials.

EPA Is Well Aware of the Dangers of Inorganic Arsenical Wood Preservatives

Prior to 1978, the inorganic arsenicals were used in a significant number of pesticide products to control insects, fungi, weeds and rodents, as well as in wood preservatives. EPA began investigating the inorganic arsenicals in 1978 because of concerns that this family of chemicals presented risks of cancer, genetic mutation, and birth defects.[2] In that review, EPA separated the use of inorganic arsenicals as wood preservatives from all other uses. In 1988, the agency banned almost all uses of nonwood-preservative pesticide products containing inorganic arsenicals because EPA determined that arsenic posed an unacceptable risk to workers and others exposed to arsenic.[3] As of 1993, all uses of inorganic arsenicals had been prohibited except for the use of arsenic in wood preservatives. The use of arsenic in wood preservatives continues.

Wood preservative arsenicals are a mixture of ingredients. The most commonly used arsenical is CCA, which is a mixture of arsenic acid, hexavalent chromium (chromium (VI)), and copper oxide, plus unlisted "inert" ingredients in proportions that vary with the particular product. According to the United States Geological Survey (USGS), approximately 34,000 metric tons of arsenic were consumed in the U.S. in 2000 and production of CCA accounted for more than 90% (or well over 30,000 metric tons) of domestic consumption of arsenic.[4]

Arsenic is a known human carcinogen. Several studies have shown that inorganic arsenic can increase the risk of lung, skin, bladder, liver, kidney, and prostate cancer.[5] The International Agency for Research on Cancer (IARC),[6] the U.S. Department of Health and Human Services (DHHS)[7] and EPA have determined that inorganic arsenic is a human carcinogen based on sufficient evidence from human data.[8]

Several studies have shown that chromium (VI) compounds can increase the risk of lung cancer.[9] IARC,[10] DHHS,[11] and EPA have determined that chromium (VI) is a known human carcinogen.[12]

In 1978, EPA issued Notices of Rebuttable Presumption Against Registration, now called Special Review, for pesticide products containing the three heavy-duty wood preservatives. Only chemicals that trigger serious health and environmental concern are placed on this fast-track review. In 1981, EPA published Position Document 2/3 on the heavy-duty wood preservatives, proposing action based on the agency's determination that uses of inorganic arsenical wood preservatives could result in unreasonable adverse effects, including oncogenic, mutagenic, teratogenic and neurotoxic effects.[13]

EPA Is Well Aware that the Consumer Awareness Program Is a Failure

The agency proposed a mandatory Consumer Awareness Program (CAP) in 1984 that would have required members of

the American Wood Preservers Institute (AWPI) and wood treaters, along with retailers, to provide consumers with a Consumer Information Sheet (CIS) at point of purchase.[14] The action was immediately challenged by AWPI. It was evident that AWPI had succeeded in weakening EPA's position when EPA published the revised proposal in 1986; the mandatory CAP had been converted into a voluntary CAP.[15] The voluntary nature of the agreement meant that EPA had no enforcement authority.

EPA soon became aware of AWPI's non-compliance with the voluntary CAP. By 1994, EPA is on record stating that the agency was unable to mandate participation in the voluntary CAP and that there was lack of participation nationwide.[16] EPA refused to take any action against AWPI to encourage compliance with the CAP.

Arsenic Hits the Fan in 2001

During the Spring of 2001, the issue of CCA-treated wood hit the headlines when Florida newspapers, the *St. Petersburg Times* and the *Gainesville Sun*, ran a series of articles on arsenic leaching out of CCA-treated wood structures.[17] State officials in Florida found elevated levels of arsenic in soil under CCA-treated playground equipment. A number of parks were closed to protect the health of children. Both state and federal lawmakers began drafting legislation designed to curtail the use of CCA-treated wood and provide consumer information.

A number of important scientific studies came to light establishing that arsenic and chromium (VI) do leach out of CCA-treated wood into the soil and on to the surface of the structure at levels that pose real risks to health.[18] In the wake of this focus on CCA, the Environmental Working Group and Healthy Building Network produced a report on the risks to children from CCA-treated playgrounds[19] and filed a petition with the Consumer Product Safety Commission (CPSC) to ban the use of CCA-treated wood in playground equipment and to conduct a general review of the safety of CCA-treated wood.[20]

After sleeping on the job for 15 years, EPA woke up to the political and public outcry over arsenic leaching out of CCA-treated wood. EPA convened two closed-door meetings on May 9, 2001, soliciting ideas about how to improve the failed CAP. The first meeting was with a few members of the environmental community (including Beyond Pesticides) and the second with a large number of wood-treatment industry representatives. Members of the environmental community insisted that EPA convert the CAP to a mandatory program. The agency rejected that proposal.

The new CAP announced by AWPI along with EPA at a public meeting on June 7, 2001 was a complete disappointment to environmental and health advocates. The bottom line: the new CAP, like the old CAP, was voluntary and therefore unenforceable. The labels neither clearly stated that the wood contains arsenic nor listed health effects of exposure to arsenic (such as cancer), and the labels would be printed on a green background (not exactly eye catching).[21]

This new CAP has evolved at EPA's request. The latest version of the CAP includes the statement, "Arsenic is in the pesticide applied to this wood," and the statement, "Some chemical may migrate from treated wood into surrounding soil over time and may also be dislodged from the wood surface upon contact with skin." The proposed labels will be printed on a red background.[22] The labels fail to list any health effects from exposure to arsenic, and, most importantly, the CAP remains voluntary and therefore unenforceable.

Legislation Would Create Mandatory Public Disclosure

Both Senator Bill Nelson (D-FL) and Congresswoman Julia Carson (D-IN) have introduced straightforward legislation that would require that each piece of CCA-treated lumber offered for sale be affixed with a warning label.[23] Titled the *Arsenic-Treated Mandatory Labeling Act* (S. 877 and H.R. 2721), the legislation requires that the label state clearly that the wood contains arsenic and that, "Arsenic exposure through the mishandling of this wood can cause cancer, nausea, vomiting or diarrhea." Of equal importance is the requirement that EPA, in consultation with the CPSC, submit to Congress a report within 60 days of the bill's passage that provides an update of the ongoing review of the inorganic arsenicals.

Senator Nelson recently attached an amendment, entitled *Arsenic in Playground Equipment* (SA 1228), to the *Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2002* (VA-HUD) (H.R. 2620). No similar amendment has been introduced in the House. Members of the House-Senate Conference Committee have yet to be named. For a list of Conferees visit the House Committee on Appropriations website at http://www.house.gov/appropriations/welcome.html or call them at 202-225-2771. Congresswoman Carson supports SA 1228 and is currently weighing her options on how best to proceed in the House.

Nelson's amendment passed the Senate by voice vote; that is a good indication that it is not considered controversial. SA 1228 requires that not later than 30 days after the date of enactment of VA-HUD bill, EPA, in consultation with CPSC, submit a report to Congress that includes:

- EPA's most up-to-date understanding of the potential health and safety risks to children playing on and around CCA-treated wood playground equipment;
- EPA's current recommendations to state and local governments about the continued use of CCA-treated wood playground equipment; and,
- an assessment of whether consumers considering purchasing of CCA-treated playground equipment are adequately informed concerning the health effects associated with arsenic. [24]

Take Action: It is critical that members of Congress hear from their constituents in support of the Arsenic-Treated Mandatory Labeling Act, S. 877 and H.R. 2721. Please contact your Senators and Representative and explain to them the risks associated with exposure to arsenic leaching out of CCA-treated wood. Ask them to support this important legislation.

It is also important to contact both the members of the Conference Committee on VA-HUD and your own representative. Urge them to support Arsenic in Playground Equipment *as amended to the appropriations bill, H.R. 2620.*

For more information about wood preservatives, explore our website and read Beyond Pesticides' two reports on the subject: Poison Poles, *focusing on the toxic trail left by heavy-duty wood preservatives from cradle to grave; and Pole Pollution, focusing on EPA's preliminary science chapter on pentachlorophenol and the results of our survey of utility companies. Contact Beyond Pesticides for more information at 202-543-5450 or www.beyondpesticides.org.*

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Beyond Picnics

Controlling ants in your home

By Becky Crouse

Your picnic basket has not seen the light of day in years, that red-checkered tablecloth is clean and stowed in the linen closet, and you haven't so much as cracked a window to let in that stifling summer air. Why then are there ants in your food, on your floor, in your cupboards, on your counters and everywhere else you dare look? Why, it's worse than that killer bee movie. It's an infestation! Something must be done to stop them, and quickly!

OK, focus, because I'm going to help. Don't call the local, poison-squirting bug buster to solve your ant problem. Conventional insecticides, aside from their health hazards, can also cause a single ant colony to break up into many smaller colonies, creating an even bigger problem. There are, however, several do-it-yourself, least-toxic ways to get rid of ants and eat in peace. As you plan your attack, remember that ants aerate soil, recycle dead animal and vegetable matter, and prey on other insect pests. They are good for the environment (well, the outdoor environment), so control yourself.

Identifying your intruders.

There are thousands of ant species that could be nibbling on your candy bar or peanut butter at this very moment. Pharaoh ants most commonly build nests indoors. They are small, reddish-brown ants that persist through the winter months, and enjoy sweets, but are omnivorous, and will eat just about anything. *See the ant identification box to find other common house-invading ants.* Identification is key for your management strategy; if you have any questions about the type of ant in your house, call your local cooperative extension office for help with identification.

Control measures.

Any pest control program must include cultural control methods. You can spray the dickens out of the pest with the most toxic chemical you can find, but as long as you provide an environment that your pest finds attractive and a way for it to get in, it will return.

1. **Locate and seal outside points of entry**. Ants usually follow distinct chemical trails that they have left to easily find their way from their point of entry to their food source. Follow the ant trail, identify the points of entry into your home, and seal them out. If you don't have a clear ant trail, place small pieces of cardboard or wax paper with syrup or a high-protein treat (depending on your ant type) out at night. In the morning, there should be a nice, thick ant trail leading to their doorway(s) into your home, and now you can seal them out. Temporary fixes include drawing a solid line with regular chalkboard chalk or putting down lines of cayenne and black pepper as repellants, or sealing entry points with duct tape, toothpaste or petroleum jelly. Silicone caulk is an excellent permanent sealant.
2. **Locate and remove the food supply**. Clean up and remove the food that is attracting the buggers. Keep kitchen counters, stove tops and floors clean. Store food in glass jars with seals or gaskets and plastic containers with tight-fitting lids. Ants can climb up the threads of screw-top jars and get in if there is no gasket or liner. Place pet food in moats – something as simple as a pie tin filled with plain soapy water with the food bowl placed in the middle can be effective in preventing ant access, but be sure your pet won't drink the soapy water. Put garbage in tightly sealed containers and empty it daily, and thoroughly rinse recyclables. Ants also feed on "honeydew," a sweet substance produced by insects that feed on plant sap, such as aphids and scale. Controlling these insects and cutting branches back from your house may help control your ant problem.
3. **Use soap!** Soapy water, either in a spray bottle or on a sponge, will kill individual ants and erase the chemical trail that the line of ants follows. It also can be used to drench outside nests, killing some ants and forcing the others to relocate.
4. **Flood 'em**. Drive ants out of flowerpots and outdoor nests by flooding them repeatedly.
5. **Try sticky barriers**. They're not pretty, but ants won't cross them. Apply one of the various, commercially available sticky barriers to foundation walls or the legs of tables or plant stands where ant problems are brewing.
6. **Lure them away**. Use a food attractant placed in a dirt-filled, clay flowerpot to lure the ants away from your house; once they've moved in, kill them with boiling hot water. Rather barbaric sounding, but effective all the same.

Least-toxic controls.

The following alternatives are safer than many pesticides, but are not risk free and should be used only when absolutely necessary. Remember, even if you choose to use a chemical, it must be used in combination with cultural controls to permanently eliminate your pests!

Desiccating Dusts. Desiccating dusts, such as diatomaceous earth and pure amorphous silica aerogel, kill ants by causing the insect to lose moisture and die. Diatomaceous earth must be garden/food grade, not the glassified diatomaceous earth used in pool filters, which can cause the lung disease silicosis.

Ant Identification: Common House Invaders

Name	Description	Foraging Behavior	U.S. Distribution Bites/Stings
Acrobat	light brown to black, larger than average (2.5-4 mm), nest outside in soil and wood, inside in foam, single queen	sweets and honeydew, can raise heart-shaped abdomen over head, new colonies by mating flights	native TN, AR, throughout US, sting and bite
Argentine	light to dark brown, average size (2.2-2.8 mm), nests outside in ground under boards, stones and concrete, multiple queens	prefers sweets and honeydew from insects, but omnivorous, forage in lines	seen mainly WA, OR, CA, MD, west to IL, TX, AZ, Mexico, HI, S. Amer., Eur, S. Africa, Australia
Crazy	dark brown to black, average size (2.2-3 mm), nests outside in soil, inside in potted plants and wall voids, multiple queens	sweets, kitchen scraps, follows no trail	mainly in AZ and Gulf states, no sting
Ghost	white gaster and legs, black head and thorax, tiny (1.5 mm), nests inside in containers, behind baseboards, outside in soil, multiple queens	sweets and grease, trails hard to see	tropic ant, number one household ant in Southern Florida, seen in HI and CA
Little black	black, tiny (1.5-2 mm), nests outside in soil, inside in wall voids and cabinets, multiple queens	sweets, grease, omnivorous, forages in trails	Northeast, Midwest, TN to TX
Odorous house	brown to black, 2.4-3.2 mm, foragers, nests outside or in wall voids, pungent "rotten coconut" odor when crushed, single queens	prefers sweets and honeydew, but omnivorous, forage in lines	native to US, wide distribution, no sting
Pharaoh	reddish brown, tiny (1.5-2mm), nest inside or in any secluded spot, multiple queens	sweets and omnivorous, found in packages, get under bandages	throughout US
Thief	yellow to dark brown, tiny (1.8-1.8 mm), nests inside walls and kitchen cabinets, outside with other ants	prefers meat and cheese, eats sweets, forage in trails, confused with pharaoh ants	throughout US

SOURCES: Olkowski, Helga, Daar, Shiela, and Olkowski, William, *Common –Sense Pest Control*, Newtown: The Taunton Press, Inc., 1991.

Place the dust in wall voids or cracks and then seal them, or sprinkle powder lightly around the edges of carpeted areas or brush it into the carpet, wait three days, and then vacuum. In cracks, the dusts can be effective for many years, as long as they are kept dry. Once-a-year applications to carpets should suffice. When using either desiccating or boric acid dust, always wear a dust mask and goggles and cover any electronic equipment that could suffer dust damage. Do not use diatomaceous earth if you have lung problems. For a quick fix, sprinkle corn meal around the outside of your home. It will make the ants thirsty, they will go for water, swell up and explode.

Boric Acid. Boric acid can be used as a dust or bait. As a dust, use it as you would the other desiccating dusts — in wall voids and cracks, and in carpets. It should not be placed or used anywhere that children or pets can access. As bait, boric acid is very effective. Foraging ants eat the bait, go back to the nest, regurgitate, share the food, and wipe out the colony. You can buy commercially made baits, such as Drax™, or make your own by mixing one teaspoon of 99% pure boric acid into one-third cup of mint-apple jelly. Place small dabs of bait in areas where you have seen ant activity and along established ant trails, but do not block the trails. Put out one to three dabs per 25 square feet, checking the baits every 1-3 days, and replacing any that have been eaten or adding a few drops of water to those that have dried out. If you have children or pets that may get into the baits, mix three cups of water with one cup of sugar and four teaspoons of 99% pure boric acid. Wrap three of four jam-sized jars with masking tape, loosely pack them with absorbent cotton and put half a cup of bait into each of the jars. Screw the lids on tightly, pierce them two or three times, and smear the outside of the jars with some of the baited syrup. The ants will eventually swarm to the jars, but don't kill them. They are your distributors and will carry the poison back to the nest. It may take time for you to see the results, but it will work.

Ants are annoying. Although you want them out of your house, and the thought of making them explode, having them unwittingly regurgitate poison for each other or luring them into your traps of doom has you rubbing your hands together with maniacal glee, they are also beneficial organisms. By all means, save your chocolate bars and potato chips (a person does need to have priorities), but don't get crazy, please.

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BORIC ACID

Boric acid is a low-toxicity, non-volatile mineral with insecticidal, fungicidal, and herbicidal properties. It has long been embraced as a safer alternative to highly volatile, synthetic chemical pesticides. Boric acid is especially effective when used as part of an ongoing integrated pest management (IPM) program that incorporates sanitation, cultural, mechanical, and biological practices.(3)

Boric acid and its sodium salts, all boron-related compounds, is generally associated with seven active ingredients — boric acid, sodium tetraborate decahydrate (borax decahydrate), sodium tetraborate pentahy-drate (borax pentahydrate), sodium tetraborate (anhydrous borax), disodium octaborate tetrahydrate, disodium octaborate (anhydrous), and sodium metaborate. No registered pesticide products contact boric oxide as an active ingredient.(6)

Boric acid was originally registered as a pesticide in the U.S. in 1948. There are currently 189 registered pesticide products on the market containg boric acid or one of its sodium salts as an active ingredient.(5)

While exposure to boric acid has been linked to adverse health effects, experts agree that careful application offers a less hazardous, more effective alternative to many pesticides, without the indoor air problems commonly associated with residential pesticide use

Use and Mode of Action

Boric acid and its salts, borates, have been used in medicine as a bactericide, a fungicide, and an antiseptic since the 1860s.(3) It is used as a wettable powder, liquid (applied as a spray or aerosol), emulsifiable concentrate, granules, powders, dusts, pellets, tablets, paste, bait or crystalline rods, depending upon the circumstances and target pest.(6)

As an insecticide, boric acid acts as a "stomach poison" for ants, cockroaches, silverfish and termites, and is most commonly used in a bait formulation containing a feeding attractant or as a dry powder. The powder can be injected into cracks and crevices, where it forms a fine layer of dust. Insects travel through the powder, which adheres to their legs. When the insects groom themselves, they ingest the poison, which causes death due to starvation and dehydration 3-10 days later. Boric acid can also abrade the exoskeletons of insects.(5) As long as the material is not allowed to become wet, its continuous presence ensures that hatching insects, which pesticide sprays commonly spare, are exposed and die as well. Many insecticidal formulations contain a desiccant to protect the boric acid from airborne moisture. These formulations can be effective for more than a year.(3)

When used as an herbicide, boric acid dessicates and/or interrupts photosynthesis in plants, or suppresses algae in swimming pools and sewage systems. As a fungicide, boric acid can be used as a wood preservative that controls decay-producing fungi in lumber and timber products.(5)

In agriculture, boric acid is used as an insecticide, herbicide and fungicide in food crops and orchards (6), and borates have also been utilized as a nutritional supplement for boron-loving crops, such as sugar beets and cabbage.(4)

Boric Acid Toxicity

Boric acid occurs naturally in water, fruits, vegetables and forage crops. It is an essential nutrient for plants and an essential element for many organisms.(5) The acute toxicity of boric acid in rats is less than that of table salt.(2) It is generally of moderate acute toxicity, and has been placed in Toxicity Category III by the EPA for most acute effects, including oral and dermal toxicity, and eye and skin irritation.(5) Sodium tetraborate (anhydrous borax) products are categorized as Toxicity Category I because of high acute toxicity for eye irritation effects.

There are few allergic responses from skin applications of boric acid. Absorption through skin is negligible unless the skin is broken or burned. Respiratory irritation can occur from chronic inhalation of airborne boric acid or borates. Workers

show eye irritation, dryness of the mouth, nose, or throat, sore throat, and cough at mean exposures of 4.1 mg/m3.(2)

The oral LD50 in rats ranges between 3160 and 4080 mg/kg body weight depending on the species and sex, with males being more susceptible than females. (For comparison, an alternative termite treatment, chlorpyrifos (Dursban®), is about 20 times more acutely toxic at 163mg/kg).(2) Large chronic daily doses of boric acid (about 1g in 1kg food) shrink testicles in dogs and rats, and interfere with reproduction.(2) High doses are selectively toxic to the testes, causing histopathological changes and even sterility in both male rats and dogs. Workers exposed to large amounts of boric acid powders in manufacturing plants were also found to have reduced sperm count and motility.

Boric acid is not mutagenic. In chronic oncogenicity studies using mice, rats and beagle dogs, boric acid and borax were found not to be carcinogenic. The EPA has classified boric acid as a "Group E" carcinogen, indicating "evidence of noncarcinogenicity" for humans. Reproductive and developmental toxicity studies using rats, mice and rabbits found maternal liver and kidney effects and decreased weight gain, as well as decreased fetal body weights. Two studies found that no litters were produced at the highest dose levels. Prenatal mortality occurred at the highest dose levels in the rabbit study.(5)

Boric acid is toxic to all living cells, partially due to enzyme inhibition. Rats fed complex organic salts or boric acid had their serum cholesterol levels lowered due to liver enzyme inhibition. Boric acid was also found to antagonize riboflavin metabolism in chickens.

The greatest danger of boric acid to humans results from chronic unprotected exposure to aerosols, or accidental acute ingestion of large amounts. It is extremely rare that an accidental poisoning of boric acid is lethal.

Ecological Effects

Boric acid is practically nontoxic to birds, fish, aquatic intertebrates, and relatively nontoxic to beneficial insects. However, its noncrop herbicidal use along rights-of-way may harm endangered or threatened plants and pose a potential threat to aquatic invertebrates, as a result of runoff into aquatic environments.(5) EPA concludes that boric acid's limited outdoor use patterns, low toxicity and natural presence in terrestial and aquatic environments reduce concerns about its impact on nontarget organisms.(5)

Effectiveness

An EPA assessment of a boric acid pilot pest control program conducted at the U.S. Army's Aberdeen Proving Ground in Maryland found that boric acid was both more economical and more effective than monthly spray treatments. (1) At least one study has shown that the combination of heat at 110 degrees F for two hours with boric acid will increase the speed at which the German cockroach is killed. (1)

A study comparing crack and crevice treatments in conjunction with a full IPM program for cockroaches in school cafeterias found that one crack and crevice application of boric acid reduced roach numbers from 40 per trap to less than three per trap within three months. The low average was maintained for two years by the single boric acid treatment. The same level of control with Dursban® required two full applications followed by a spot treatment. The need for multiple treatments combined with the higher unit cost of Dursban® made boric acid much more cost-effective.(1)

Regulatory Information

EPA is requiring three phytotoxicity studies to assess the risks of non-target plants and endangered plant species. These studies are not part of the target database and do not affect reregistration eligibility of boric acid and related active ingredients. EPA has requested product-specific data including product chemistry, acute toxicity, and efficacy studies, revised Confidential Statements of Formula, and revised product labeling for reregistration. EPA has reregistered all 43 boric acid products covered by the General Registration Standard. For these products, only current labeling and Confidential Statements of Formula must be submitted to ensure that they still meet the criteria set forth in that document.(5)

EPA has issued a general exemption for tolerance (acceptable residues) of boric acid in raw agricultural commodities, but is setting limits for the chemical in food and feed additives in the unlikely event that its use in food establishments results in food residues.

Under its worker protection standard, EPA is requiring personal protective equipment (PPE) and a 12-hour reentry time for nonresidential uses of boric acid and its salts because it believes that use patterns present a potential for dermal and inhalation exposure among applicators and people reentering treated areas.(5)

BORIC ACID ChemicalWATCH Fact Sheet Bibliography

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Preparing for a Campaign

A framework for winning

by Mary O'Brien

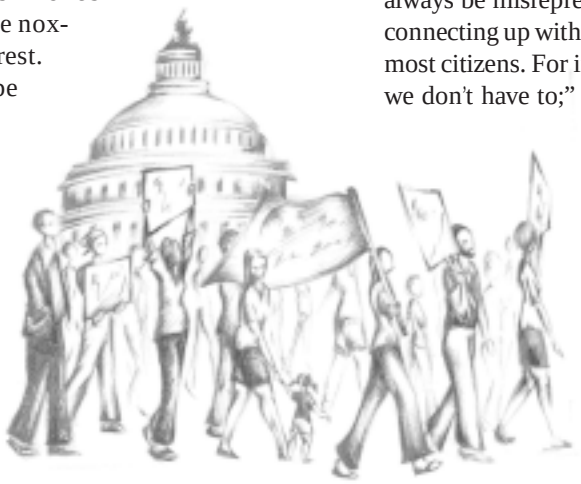
The following is a presentation made by Mary O'Brien at the Nineteenth National Pesticide Forum, Healthy Ecosystems, Healthy Children *in Boulder, Colorado, May 18-20, 2001. Dr. O'Brien is the author of* Making Better Environmental Decisions *(MIT Press, 2000) and the ecosystems project director at the Science and Environmental Health Network in Eugene, Oregon. For a videotape of Preparing for a Campaign or any presentation from the Forum, contact Beyond Pesticides.*

There isn't anybody here who hasn't prepared for and engaged in a campaign; and many of you have led and/or been part of highly successful campaigns. So all I can share on the topic of preparing for a campaign are some reflections drawn from campaigns I've participated in, helped lead, or watched.

I'm going to list 15 suggestions for campaigns and some of them necessarily cannot apply in particular circumstances, but they are general ideas that pass through my mind when planning a campaign:

1. Our campaigns need to be large in scope.

They can be intensely local, as in one's school district, or regarding one noxious weed in one national forest. But each campaign should be large in vision: that is, we need to try to contribute to solving very large, systemic, national and global problems through our campaigns, even if they are local. For instance, a campaign about pesticides in schools needs to contribute to solving the larger problems of how our public educational institutions are organized; how children see their bodies in relation to toxics (e.g., one third of the girls in an elementary school in which pesticides are halted will be smoking by the time they are in high school); how corporations influence what happens in our schools; our right to know; the problem of our whole society using toxics which don't have to be used.



It isn't that we need to talk about all those problems in our campaign, but the language we use in our campaigns, the methods we use, and the outcomes we're seeking, should fit in with what needs to be done globally. "Think globally, act locally."

2. Whenever possible, our campaigns should focus on changing the rules.

For instance, we can try to get pesticides like the sulfonylureas, or atrazine banned or highly restricted, but those are almost fruitless campaigns within the current cost-benefit rules which EPA developed and operates under. Pesticides are registered for use under a cost-benefit analysis - that is, if company profits exceed the value of our lives, then the pesticide must be registered. That is an immoral and scientifically bankrupt rule – and it needs to be changed.

A coalition campaign within Massachusetts, for instance, is working to install the precautionary principle as state policy for children's health (and hopefully, eventually, for the health of all ages and species).

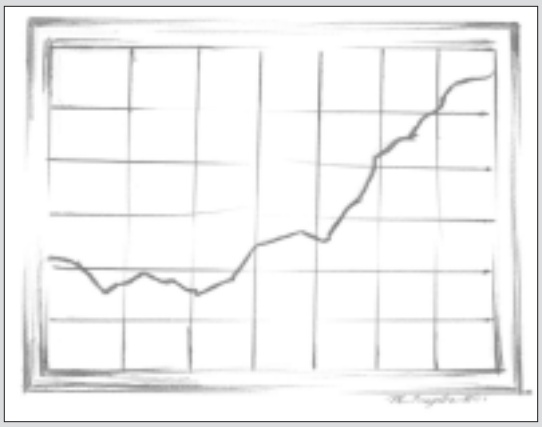
3. Our campaigns should have positive, feasible goals that connect up with the way almost all people believe.

We will always be outspent in our campaigns, and we will always be misrepresented. Therefore, to win, we need to be connecting up with something that runs strong and deep with most citizens. For instance, "We shouldn't pollute children if we don't have to;" or "We shouldn't use our streams as industrial wastebaskets if the companies don't have to."

When Eugene, Oregon citizens undertook an initiative campaign to establish a comprehensive reporting system by manufacturers regarding all their inputs and outputs of hazardous chemicals, we knew that in survey after survey (locally, nationally), 90% of American citizens believe they should have the right to know what toxics are being used and released in their community. Our campaign hooked up with that simple message, and though we were outspent and the mayor, City Council, newspaper, and business groups opposed us, we won 55% to 45% (see www.ci.eugene.or.us\toxics).

4. Our campaigns should simultaneously address environmental care, social care, and democracy.

When we plan our campaigns, we need to consider people, workers, children, trees, birds, fish, and participant de-



The Precautionary Principle

The most comprehensive definition of the precautionary principle was spelled out in a January 1998 meeting of scientists, lawyers, policy makers and environmentalists at Wingspread, headquarters of the Johnson Foundation in Racine, Wisconsin.

"When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."

Key elements of the principle include taking precaution in the face of scientific uncertainty; exploring alternatives to possibly harmful actions; placing the burden of proof on proponents of an activity rather than on victims or potential victims of the activity; and using democratic processes to carry out and enforce the principle - including the public right to informed consent.

mocracy in both our processes and campaign goals. If we take care of people and not our other relations, we are simply digging ourselves into more alienation from the world in which we are embedded. If we take care of fish and birds and little children, but don't pay attention to people who are trying to make a living, we end up at cross-purposes with a basic need in our society to work. If we are not inclusive in our campaign, and if we want to direct the campaign without input from lots of people – we contribute to a crippling of democracy.

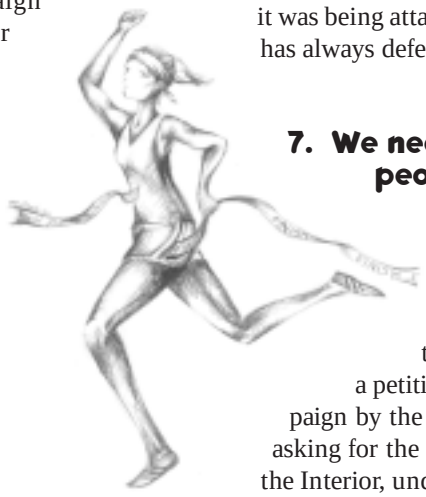
5. We need to intend to win.

We will design our campaigns very differently if we are absolutely determined to win than if we half expect to lose. We have an obligation to win, because our campaigns are for health and democracy and nature, not for ourselves alone. So we need to do everything possible to win, including careful strategy, accuracy in all information, ambitious fundraising, strong participation by people with all kinds of skills (more about that later), never coasting, etc. We basically have to plan our campaign in such a way that we are addressing the question, "What will it take to be certain to win?"

6. We need to involve unlikely people.

We need to involve youth, business people, city councilors, church leaders, old people, artists, writers, media, local prisoners, whomever. We absolutely HAVE to leave our comfortable, warm circle of environmental activists, and contact others who may care about the issue, but who haven't thought about it; or haven't been approached for how they could help.

We also have to go talk to people who will never support us, but who, after talking with us, will be not likely to demonize us. Let me give an example from that Eugene right-to-know campaign. Near the start of our campaign, I knew that the frontrunner candidate for Mayor, closely aligned with the Chamber of Commerce, was not going to support our campaign. But I phoned him up to ask if we could talk about it. We met for lunch, and he listened to our plans for the law. He surprised me when he said, "Five years ago I would have thought this law was too strict. I don't think so now. We have too many toxics in our environment." He indicated that he was not going to support it, however, for a technical reason: We were campaigning to have this as part of the city's constitution (charter) rather than as an ordinance. This is because if it were passed as an ordinance, the City Council could alter it, but if it were passed as a charter amendment, the City Council could not change it without taking it back to the public for a vote. However, this candidate said that if he became mayor (which he did), and if our right-to-know law passed (which it did), he would always defend it. He has been true to his word: He has twice testified on behalf of it in the state legislature when it was being attacked by industry lobby groups, and he has always defended it to detractors.



7. We need to have a bazillion ways people can pitch in to help.

The best campaigns are those that can be pitched in to by people we hardly know. The first time I ever helped with any political action (other than protesting the Vietnam War) was when I saw a petition printed in a magazine. It was a campaign by the Sierra Club to get a million signatures asking for the resignation of James Watt, Secretary of the Interior, under President Reagan. I lived in Los Angeles; I didn't belong to the Sierra Club or any other advocacy group; and I had never taken any environmental action. However, this one seemed simple enough, so I set up a card table in front of Safeway (I didn't even know if this

was allowed). While I was setting it up, a man in a car parked nearby was watching me. It seemed to me he was glaring at me. When I finally got my card table and sign and petition and chair set up, he opened his car door, shuffled over in bedroom slippers, and gruffly said to me, "Give me that petition. I'll sign it."

"All right!" I thought. "I can do this!"

We need to NOT burn out people. If we're burning people out, then we're not running our campaign right, because we're not involving enough people to share jobs.

We need to give people very specific jobs that they can feel comfortable doing, and then not ask them to do twenty other things. This is a major failing of campaigns: we often don't figure out a whole hierarchy of tasks - from tasks that take 20 hours a week to tasks that take 20 minutes a week.

8. Thank everyone all the time.

In my town of Eugene, Oregon, I am active with an all-volunteer group, Citizens for Public Accountability. This is an extraordinary group: we have met every week since June 1995; that's six years. That's a lot of meetings, and we do a lot of activities. But we also constantly thank each other, report what each other has done, are grateful for whatever people do. It (and winning our campaigns) keeps us going.

It takes so little time to thank people, and it keeps morale so high.

9. Provide the public with simple answers to every argument the opposition has or might make.

If you can anticipate the arguments that will be used against you, ahead of time, give the public the answers before they even hear the arguments.

Go talk to the opposition and find out what they think of your proposal. Most people cannot help themselves from answering a question, so you will find out valuable information if they answer. And if they WON'T answer your question, you can tell the media they won't answer your question. Asking questions is a win-win strategy. You get answers you can work with; or you don't get answers, and you can work with that.

10. Spread out power.

Have a steering committee; have lots of spokespersons; encourage people to figure out ways to help. Avoid even using your group's name as leader, if the campaign will be more powerful that way. In that Eugene, Oregon right-to-know campaign, which involved gathering 11,000 signatures, being in public debates, running a six-months' long campaign, we never indicated that Citizens for Public Accountability (CPA) was a leader. We had spokespersons who were CPA members, and some who weren't. We never mentioned CPA; we simply referred to "citizens" working on this campaign, and so that's how the newspapers, and radio and TV talked about the campaign. Likewise, many citizens pitched in who were not at all involved with CPA, because they understood that this was a campaign "by citizens," so they could identify with it.

Why do you need credit, if the point is to win?

11. Be funny.

Your humor should avoid being nasty. Make sure some of the humor is on you; have the humor be a signal to people out there that this is a grand undertaking.

I remember in the 1980s when Greenpeace was part of an extensive campaign in the Great Lakes region regarding persistent bioaccumulative toxics. In their campaign to get the International Joint Commission on Great Lakes Water Quality to address the issue of how chlorine was the root of most persistent bioaccumulative toxics in the Great Lakes, they used a huge banner, which read, "Dow shall not kill."

Once in Australia, I watched a news conference regarding Antarctica put on by Greenpeace. They conducted the entire news conference in penguin costumes, and relayed their message regarding the need for an Antarctic protection treaty from the point of view of penguins.

Both of these instances have remained etched in my mind long after I have forgotten so many other messages and news conferences. It is probably the same with you, if you think back over the years: You probably remember humor.

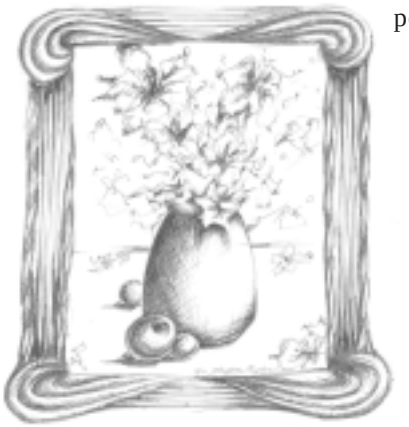
12. Be accessible so that all kinds of people can see themselves joining your campaign.

The Wilderness Society of Australia once undertook a massive, year-long blockade against the construction of a dam on the Franklin River. It was ultimately successful, even though road construction began during their campaign, even though hundreds of citizens were jailed. But one thing The Wilderness Society insisted on for their spokespersons: Always wear a suit. Hold news conferences in a suit; get thrown into the river in a suit; get carted away in a suit. Why? They wanted people who watched the campaign to identify with the campaigners, to understand that these were people like them. They

wanted to make it easy for people to join the blockade. And it worked. Old women were being thrown in the river, business people were being thrown in the river. Ultimately, the party in federal power fell over the Franklin Dam issue, and the dam was never built.

Thus, I would suggest that you never isolate yourselves by your clothes, or knowledge, or righteousness. You want to be seen for what you are: a person who cares about the future, children, etc. Act on the assumption that everyone cares, and more of them will believe that they, too, can help.

13. Have great art.



Never underestimate the power of superb art, superb posters. A campaign to end nuclear power in Oregon had a poster I still see on people's walls – it was great art.

The logo for our Eugene right-to-know campaign was roughly a fish with a human face with a down-turned mouth and an "X" for its eye. It was a black fish on a yellow background. The simple slogan was "Ignorance is toxic." We used that art and slogan on everything - bumper stickers, lawn signs, buttons, and ads. Thus, with not much money, we looked like we were everywhere, and the art became immediately recognizable.

Some months after we won, a lobbyist that had been hired by the Chamber of Commerce to oppose our campaign confided to one of our activists that when she saw our logo, she knew she was going to lose.

14. Do your whole campaign without ego.

The point is not your organization or you. The point is winning for the Earth and its living beings. So ego should have exactly zero to do with our campaigns. To the extent that it helps to be essentially invisible, do it. Who cares if some politician who jumped on the bandwagon at the last minute gets credit? Just make a big deal of thanking the politician. The Bamako Convention of African countries, which forbids other countries to pay (bribe) African countries to accept their hazardous waste for disposal, was largely written by Greenpeace. Their name never appeared in connection with it.

If the campaign depends on you being recognized, you're doing it for the wrong reason, and it isn't being run right.

15 Steps
to Winning a Campaign

1. Our campaigns need to be large in scope.
2. Whenever possible, our campaigns should focus on changing the rules.
3. Our campaigns should have positive, feasible goals that connect up with the way almost all people believe.
4. Our campaigns should simultaneously address environmental care, social care, and democracy.
5. We need to intend to win.
6. We need to involve unlikely people.
7. We need to have a bazillion ways people can pitch in to help.
8. Thank everyone all the time.
9. Provide the public with simple answers to every argument the opposition has or might make.
10. Spread out power.
11. Be funny.
12. Be accessible so that all kinds of people can see themselves joining your campaign.
13. Have great art.
14. Do your whole campaign without ego.
15. Have fun.

15. Have fun.

Life is too short to be all wound up in anger and tightness and finger-pointing. If you lose a round, but have had fun, then you'll be around for the next round. If your campaign plan sounds like drudgery, re-do it until it has some grand fun in it. Your campaign then will not only add years to your life, it will be attractive to others.

And that's 15 points, and so I'll stop there. Have fun. Win!

Resources

Trust Us, We're Experts: How Industry Manipulates Science and Gambles With Your Future

Sheldon Rampton and John Stauber, (Penguin Putnam, 2001). We count on the experts. They tell us who to vote for, what to eat, and how to raise our children. We watch them on TV, listen to them on the radio, read their opinions in magazine and newspaper articles and letters to the editor. We trust them to tell us what to think, because there is too much information to sort it all out ourselves. This book will make you lose your trust. *Trust Us, We're Experts* uncovers the secret truth behind corporations, PR firms and the media. It is full of historical references that will make you question the validity of the 'supposed experts'. It is an extremely witty, creative book that will grasp your attention until the very end. Each chapter covers a new topic that makes you reconsider all the things you have once thought were "right." It's a fast read, unleashing flawed studies that well-regarded companies have documented over the years. It points out how virtually every study, every television commercial, and even every news report has been manipulated to make you think a certain way. We learn why and how even the most well-regarded studies have left out crucial steps, or have used biased wording to skew their studies. We see how corporations can easily trick the human mind with just a few minor adjustments to their ad campaign. Destined to be hated by PR firms and corporations everywhere, *Trust Us, We're Experts* is an eye-opening account of how these entities reshape our reality, manufacture our consent, get us to part with our money, even change our lives. This book will leave you frustrated, unsure, aggravated, and unable to trust anyone. *For a copy of* Trust Us, We're Experts *go to* www.beyondpesticides.org. *Cost is $24.95 + $3.50 shipping and handling.*

VIDEO – Wood Preservatives in the News: Arsenic and Penta are Poisoning our Environment

(Beyond Pesticides, 2001). Arsenic and pentachlorophenol (penta), two deadly toxic chemicals, both linked to cancer, are leaching out of pressure-treated wood. Local television media from coast to coast have been conducting soil and surface wipe tests of treated wood, documenting the fact that these cancer-causing pesticides can be picked up on the hands of children playing on or near the wood and ingested by those children. Beyond Pesticides has collected a series of television news pieces on video from Seattle, WA to Washington, DC that address the risks associated with the use and handling of these toxic timbers. Beyond Pesticides sees this video as a powerful organizing tool and we encourage people to contact local media outlets to suggest that they conduct their own soil and surface wipe tests. The heavy-duty wood preservatives, namely the inorganic arsenicals (such as chromated copper arsenate, or CCA), penta and creosote, each has a primary application: CCA is used in lumber; penta is used in utility poles; and, creosote for railroad ties. CCA-treated wood burst onto the national headlines in Florida during the Spring of 2001. The *St. Petersburg Times* and the *Gainesville Sun* published a series of articles on arsenic leaching out of CCA-treated wood playground equipment. The discovery of highly elevated levels of arsenic in the soil lead to the closure of a number of parks with removal of playground equipment and soil as a safety precaution. The television stations featured on *Wood Preservatives in the News* are: King 5 News, Seattle, WA; WCCO 4 News, Minneapolis, MN; KMSP 9 News, Twin Cities, MN; and, Fox 5 News, Washington, DC. With the exception of one of the pieces from King 5, which focuses on high levels of penta around utility poles, all of the news pieces focus on CCA-treated wood. The reports cover the results of the soil and/or surface wipe tests as well as the failed EPA Consumer Awareness Program, and steps one can take to minimize exposure while working with CCA-treated wood. *For a copy of the video, send $10 to Beyond Pesticides.*

Poisoned Playgrounds

(Environmental Working Group and Healthy Building Network, 2001). Virtually all of the lumber sold for outdoor use in the U.S. is pressure-treated and injected with toxins to preserve the wood and prevent insect damage. The most common wood preservative and pesticide used for this purpose is chromated copper arsenate (CCA), which is 22 percent pure arsenic. A 12-foot section of pressure-treated lumber contains about an ounce of arsenic, or enough to kill 250 people. Yet virtually all of the wooden playground equipment that our children come in contact with is treated with this toxic pesticide. In the new report, *Poisoned Playgrounds*, the Environmental Working Group (EWG) takes a close look at this potentially deadly combination. The report compares the risks of arsenic exposure through treated playground equipment to drinking water exposure, finding that treated wood is a far greater risk. Based on an extensive review of the scientific literature, EWG estimates that a 40-pound child who plays daily on arsenic-treated wood could be exposed to more than five times the arsenic allowed under EPA's proposed drinking water standard (10 parts per billion). The report also analyzes the Consumer Product Safety Commission's study on wood preservatives, and concludes by offering recommendations to protect children from the hazards of treated lumber. Poisoned Playgrounds *serves as a great companion to Beyond Pesticides' two reports on wood preservatives*, Poison Poles *and* Pole Pollution, *both available on the Beyond Pesticides website. To see a free copy of the EWG report, go to* www.ewg.org/pub/home/Reports/poisonedplaygrounds/ *or call EWG at 202-667-6982. Hardcopies are $25.*

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RESOURCES

T-Shirts

❑ Beyond Pesticides' Dragonfly T-shirt. Printed on sage green, 100% organic cotton with soy ink. Sizes S-XL. $15 each; 2 for $25.

❑ "Pollution Prevention Is the Cure." full color graphic on 100% natural organic cotton Beneficial-T's by Patagonia™ T-shirt. Sizes S-XL. $10 each; 2 for $15.

❑ "Speak to the Earth, and It Shall Teach Thee." In green and blue on 100% natural organic cotton. $10 each; 2 for $15.

❑ "Freedom from Pesticides is Every Body's Right." Black letters with teal, purple and yellow accents, 100% natural organic cotton. Size S only. $10, 2 for $15.

Books

❑ *A Failure to Protect.* Landmark study of federal government pesticide use and pest management practices. $23.00. *Summary and Overview* $5.00.

❑ *Unnecessary Risks: The Benefit Side of the Risk-Benefit Equation.* Explains how the EPA's Risk-Benefit Analyses falsely assume the need for high-risk pesticides, how "benefits" are inflated, how alternatives might be assessed, and the public's right to ask more from its regulators. $10.00.

❑ *Safety at Home: A Guide to the Hazards of Lawn and Garden Pesticides and Safer Ways to Manage Pests.* Learn more about: the toxicity of common pesticides; non-toxic lawn care and why current laws offer inadequate protection. $11.00

❑ *Voices for Pesticide Reform: The Case for Safe Practices and Sound Policy.* A study documenting stories of tragic pesticide poisoning and contamination, and successfully used alternatives that avoid toxic chemicals. $20.00 *Summary: Voices for Pesticide Reform $5.00*

❑ *Poison Poles: Their Toxic Trail and the Safer Alternatives.* A study on the largest group of pesticides – wood preservatives, the contamination associated with treated wood utility poles and the available alternatives. $20.00

❑ *Pole Pollution.* Deals specifically with the wood preservative pentachlorophenol, and the EPA's shocking findings about its toxicity. $7.00.

Back Issues

❑ Back issues of *Pesticides and You* $2.00 each

❑ Back issues of *Technical Reports* $1.00 each

Brochures ($2.00 each; bulk discounts available)

❑ Pest Control Without Toxic Chemicals

❑ Least Toxic Control of Lawn Pests

❑ Agriculture: Soil Erosion, Pesticides, Sustainability

❑ Estrogenic Pesticides

❑ Pesticides and Your Fruits and Vegetables

❑ Pesticides: Are you being poisoned without your knowledge?

❑ Pesticides – Warning: These Products May Be Hazardous to Your Health

❑ Pesticides in Our Homes and Schools

Testimony

❑ Lawn Care Chemicals, 3/28/90 or 5/9/91, $4.00

❑ Federal Insecticide, Fungicide, Rodenticide Act (FIFRA), 4/23/91 or 6/8/93, $4.00

❑ FIFRA - Federal Insecticide, Fungicide, and Rodenticide Act, 6/8/93 $4.00

❑ Food Safety, 10/19/89, 8/2/93, or 6/7/95, $4.00

❑ School Environmental Protection Act (SEPA) 7/18/01, $4.00

❑ School IPM, 6/20/91, 3/19/97, or 3/30/99, $5.00

❑ New York City's Response to the Encephalitis Outbreak, 10/12/99 $4.00

❑ Parents: Right-to-Know-Schools, 3/19/97 $3.00

Publications

❑ Expelling Pesticides from Schools: Adopting School IPM $20.00

❑ Beyond Pesticides' West Nile Virus Organizing Manual $15.00

❑ Beyond Pesticides'ChemWatch Factsheets: individual: $2.00, compilation: $20.00

❑ Getting Pesticides Out of Food and Food Production $5.00

❑ NCAMP's Pesticide Chemical FactSheets; individual: $2.00, book: $20.00

❑ Least-Toxic Control of Pests $6.00

❑ Community Organizing Toolkit $12.00

❑ Model Pesticide Ordinance, Model School Pest Management Policy, Model State School Pesticide Law $5.00 each

❑ Children, Pesticides, and Schools: Adopting School IPM $10.00

❑ *Schooling of State Pesticide Laws* (with 2000 update) $5.00

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