

CLEAN WATER ACTION

**Testimony presented before the
House Great Lakes and Environment Committee
by Cyndi Roper, Michigan Director, Clean Water Action
April 30, 2008**

Good afternoon, Chairwoman Warren and members of the Committee. Thank you for the opportunity to speak to you today. My name is Cyndi Roper and I'm the Michigan State Director for Clean Water Action. I'm here today representing our more than 235,000 Michigan members who are committed to protecting Michigan's environment and preventing health-threatening pollution. As such, restricting the use of pharmaceutical lindane is a priority issue for Clean Water Action and our members across the state. Michigan's water is key to our past and present way of life. As stewards of the Great Lakes ecosystem, we are charged with the important duty of striving to ensure we protect our most prized natural resource for the future. We are also charged with protecting our most vulnerable population – children – from the impacts of toxic chemicals.

As you have already heard today, there is substantial evidence for restricting the use of lindane-containing pharmaceuticals on the basis of protecting children's health. Today I will speak to the additional risks that lindane poses to our water and environment, and to the success of the 2002 California ban of the use of pharmaceutical lindane. As noted in the FDA's stern warning letter to Morton Grove Pharmaceuticals, "Lindane Shampoo is plainly labeled as second line treatment, suitable only when other, safer treatments fail or are not tolerated." HB 4569 does not ban pharmaceutical use of lindane, but applies common-sense restrictions consistent with the FDA's warnings.

To begin, lindane is toxic to humans and the environment starting with the initial manufacturing process. The active isomer used in lindane containing products is less than twenty percent of the raw hexachlorocyclohexane. In previous decades, millions of tons of the residual toxic waste accumulated globally, as dramatically referred to by Dr. Mark Miller in his testimony before this

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committee in January. Contamination remains to this day. Even before its intended actual applications, lindane has left behind a global toxic legacy.

Here in the U.S., what do government agencies say about lindane and water? Lindane is classified by the U.S. EPA as a "Priority Pollutant" under the Clean Water Act "for the protection of aquatic life and human health in surface water." (1) Lindane is also classified as one of the twenty-two "Bioaccumulative Chemicals of Concern" in the Great Lakes (2) and is supported by "continuing evidence that the highly bioaccumulative nature of these toxic chemicals presents a significant potential risk to human health, aquatic life and wildlife." (3) Michigan's Department of Natural Resources recognizes that organochlorine pesticides including lindane "are not degraded by natural biological processes and become a permanent part of the environment." (4) Since many of these warnings apply to both agricultural and pharmaceutical uses of lindane, it's very encouraging that agricultural uses of lindane have been withdrawn in the US and in many countries. However, the inherent risk from pharmaceutical use of lindane remains.

It is true that thanks to many of the warnings by government agencies, prescription use of lindane is declining, but what harm are we willing to accept in the face of the risks posed by this chemical? The latest "State of the Great Lakes" report (2007) says that lindane was "routinely found" in Lake Ontario, commonly found in Lake Huron, and detected in Lake Erie. Lindane was also found in sediments in the St. Clair River and in Paint Creek in the Lake St. Clair watershed in monitoring done by the US Geological Survey in partnership with the Lake St. Clair Regional Monitoring Project from 1990-2002. Lindane has also been measured in the tissues of bivalves (mussels) throughout the coastal US and Great Lakes as recently as 2005 by the National Oceanic and Atmospheric Administration's National Status and Trends Program. (5) As a bioaccumulative pollutant, *any* detection of lindane in Michigan's water and wildlife should be of concern. HB 4569 puts reasonable restrictions in place to help minimize the health and environmental risks potentially caused by the use of lindane containing products.

In addition to the government warnings already mentioned, lindane is a known contaminant in municipal wastewater. When used as treatment for head lice or scabies, lindane containing

shampoos and lotions are washed down the drain and into wastewater. Unfortunately, much of this lindane passes through the wastewater treatment plant and ends up downstream in lakes and rivers. (6) It is of paramount concern, then, that “a single treatment for head lice, when rinsed down the drain, contributes enough lindane to bring 6 million gallons of water over certain regulatory standards in California.” (7)

As mentioned earlier, safer, effective alternatives to pharmaceutical lindane exist. This committee heard testimony from Dr. Mark Miller, an expert on the dangers of lindane and the results of banning its pharmaceutical use in California. As you may recall, California’s ban on the use of lindane for treating head lice and scabies took effect in 2002. Not surprisingly, when wastewater across California was tested four years after implementation of the ban, lindane concentrations declined from well above the California standard in 2000 to virtually undetectable concentrations in 2006. (8) We would be remiss to assume that water resources in California and Michigan can be directly compared, of course. In Michigan, we sit in the middle of twenty percent of the world’s freshwater. This blessing also presents a problem of dilution; lindane is rarely, if ever, detected in water in Michigan. So why are we concerned? First, not detecting lindane in water can be a misrepresentation of actual levels. Some wastewater treatment facilities in Michigan do not even routinely test for lindane. Secondly, the life of lindane in water is much shorter than its life in soil and wildlife. Monitoring would have to be done at the exact right time and place to find levels of lindane resulting from pharmaceutical use, even though we know it gets into the environment.

The reality of what we’re talking about here is this: lindane is washed down the drain and into our lakes and rivers. We don’t know when, and we don’t know in what amounts. We do know that it is toxic to humans and wildlife from its inception and that it accumulates in the environment. Why do we continue to perpetuate these risks? As representatives elected by the people of this state, you are given the enormous responsibility of protecting the Great Lakes. How will we be judged if we do not act now in the face of the risks posed by pharmaceutical use of lindane? As history has often taught us, dilution is not the solution to pollution; we must take a precautionary approach to protecting the world’s greatest freshwater resource and Michigan’s children.

Thank you for listening to my comments this afternoon. We look forward to your support of HB 4569.

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